# SOUTHEASTERN BIOLOGY



Volume 59 October, 2012 Number 4

# ASB ONLY CALL FOR PAPERS ASB FOR THE 74<sup>TH</sup> MEETING

ASB Marshall University, Huntington, WV ASB
APRIL 10-13, 2013

MEETING SITE: CHARLESTON CONVENTION CENTER

ASB CHARLESTON, WEST VIRGINIA ASB

ABSTRACT SUBMISSION—SEE PAGE 526.

ASB MARSHALL WEARE... ASB

ASB ASB

ASB ASB

ASB ASB

ASB ASB

ASB ASB

 $ASB \begin{tabular}{ll} Old Main, which houses Marshall University's administrative offices, is the oldest building on campus. \\ ASB \end{tabular}$ 

The Official Publication of The Association of Southeastern Biologists http://www.sebiologists.org

#### SOUTHEASTERN BIOLOGY

(ISSN 1533-8436)

(10014 1000-0400)	
SOUTHEASTERN BIOLOGY (ISSN 1533-8436) is published online quarterly in January, April, July, and Octobe the Association of Southeastern Biologists, Inc., P.O. Box 276, Elon, NC 27244-0276. Please send address chang the SOUTHEASTERN BIOLOGY business manager, Tim Atkinson, Assoc. of SEB, P.O. Box 276, Elon, NC 27244-0410 All contributions, inquiries about missing back numbers and other matters should be addressed to the Journal E	es to 0276.
News items should be sent to the News Editor. Send books to be reviewed to the Book Review Editor.	
Journal EditorJames D. Caponetti, Division of Biology, University of Tennessee, Knoxville, TN 37996-0	)830;
(865) 974-6841; Fax (865) 974-4057; jcaponet@utk.edu.	
Associate EditorConley K. McMullen, Dept. of Biology, James Madison University, Harrisonburg, VA 22 (540) 568-3805; Fax (540) 568-3333; mcmullck@imu.edu.	2807;
Web EditorAshley B. Morris, Department of Biology, Middle Tennessee State University, Murfreesbore 37132; (615) 494-7621; amorris@mtsu.edu.	o, TN
Business ManagerTim Atkinson, Assoc. of SEB, P.O. Box 276, Elon, NC 27244-0276; (336) 538-6	3224;
tim.atkinson@carolina.com.	
News Editor	1000
Book Review Editor Melissa Pilgrim, Department of Biology, University of South Carolina Upstate, Spartanburg 29303; (864) 503-5781; mpilgrim@uscupstate.edu.	յ, SC
Book Rev. Assoc. Eds Christopher G. Brown, Dept. of Biology, Shorter College, Rome, GA 30161; (706) 233-7	7265.
cbrown@shorter.edu. Jennifer Mandel, Dept. of Plant Biology, 2502 Miller Plant Scie Bldg., University of Georgia, Athens, GA 30602; (706) 583-5510; ellis.jen@gmail.com.	
Meetings CoordinatorScott Jewell, P.O. Box 1088, Mebane, NC 27302; Office (336) 421-0034; Fax (336) 421-3 Cell (336) 213-7373; a2zconvention@gmail.com.	3425;
ASB OFFICERS	
PresidentDonald H. Roush, Dept. of Biology, University of North Alabama, Florence, AL 35632; (765-4435; Fax (256) 765-4430; dhroush@una.edu.	(256)
President-ElectZack Murrell, Dept. of Biology, Appalachian State University, Boone, NC 28608; 828-262-2	2674:
murrellze@appstate.edu.	.,
Vice President	vard.
Jackson, TN 38301; (731) 425-1920; racook@memphis.edu.	,
Past President	a TN
37902; (865) 632-3609; Fax (865) 632-4223; pbcox@tva.gov.	,
Secretary	807.
(540) 568-3805; Fax (540) 568-3333; mcmullck@jmu.edu.	.001,
Transurer Tim Atkinson Assoc of SED D.O. Boy 276 Elon N.C 27244 0276: (226) 529 6	224.
TreasurerTim Atkinson, Assoc. of SEB, P.O. Box 276, Elon, NC 27244-0276; (336) 538-6	)224,
tim.atkinson@carolina.com.	
Membership OfficerTerry D. Richardson, Department of Biology, Box 5048, University of North Alabama, Flore AL 35632; (256) 765-4429; Cell (256) 443-9165; Fax (256) 765-4430; tdrichardson@una	.edu.
Database Manager Deborah Atkinson, Office of Continuing Education, School of Public Health, University of I	North
Carolina, CB#8165, 400 Roberson Street, Chapel Hill, NC 27599-8165; (919) 843-6892 (919) 966-5692; datkinso@email.unc.edu.	
ArchivistJohn Herr, Dept. of Biological Sciences, University of South Carolina, Columbia, SC 29	วากล.
(803) 777-8110; Fax (803) 777-4002; herr@biol.sc.edu.	1200,
(803) 777-6110, Fax (803) 777-4002; neir@biol.sc.edu.	

#### **Executive Committee Members-at-Large**

- 2013: James T. Costa, Dept. Biol., Western Carolina U., Cullowhee, NC 28723; (828) 227-3811; costa@email.wcu.edu. Ashley B. Morris, Department of Biology, Middle Tennessee State University, Murfreesboro, TN 37132; (615) 494-7621; ashley.morris@mtsu.edu.
- 2014: Irene Kokkala, Center for Teaching and Learning, 407 Health and Natural Sciences Building, North Georgia College & State University, Dahlonega, GA 30597; 706-864-1868; Fax 706-867-2703; ikokkala@ngcsu.edu. Roland Roberts, Department of Biological Sciences, 800 York Road, 341 Smith Hall, Towson University, Towson, MD 21252; 410-704-3034; rroberts@towson.edu.
- 2015: Judy Awong-Taylor, School of Science and Technology, Georgia Gwinnett College, 1000 University Center Lane, Lawrenceville, GA 30043; (912) 441-4610; jawongta@ggc.edu.
  - William Ensign, Dept. of Biology and Physics, Kennesaw State University, Kennesaw, GA 30144; (770) 499-3505; bensign@kennesaw.edu.

#### **PURPOSE**

The purpose of this association shall be to promote the advancement of biology as a science by encouraging research, the imparting of knowledge, the application of knowledge to the solution of biological problems, and the preservation of biological resources. The ASB has representation in Section G Committee of the AAAS. Varying types of membership are available to individuals and institutions. See inside back cover.

#### TIME AND PLACE OF FUTURE MEETINGS

- 2013 April 10-13: Hosted by Marshall University, Huntington, WV. Meeting site is the Charleston Convention Center, Charleston, WV.
- 2014 April 2-5: Spartanburg, SC (TBA); 2015 April: Alabama (TBA); 2016 April: TBA; 2017 April: Spartanburg, SC (TBA).

The View from Here 429

#### THE VIEW FROM HERE

#### A MESSAGE FROM THE PRESIDENT

#### DONALD H. ROUSH

Our 73<sup>rd</sup> Annual Meeting (ASB's 75<sup>th</sup> anniversary) convened at Athens, GA in April was by most accounts one of the best in recent memory. I hope you were able to attend. Looking back at the meeting numbers, one of the most impressive was the number of attendees. With 800+ people attending, this meeting was one of our largest ever. I want to thank everyone who attended because this is what makes our Association strong. The work of the organizers to provide interesting symposia, and the members by making paper



and poster presentations was significant in making this such a successful meeting. In addition, reminders of our past were visible around the venue for everyone to enjoy. The PowerPoint program that scrolled through many interesting pictures and events was almost always surrounded by attendees pointing and laughing and commenting on old and new faces. This provided a time for reflection about friends and colleagues who have been lost and times when new friends and contacts were made. The work of Zack Murrell and his committee to celebrate our 75<sup>th</sup> anniversary was very well done. John Herr was outstanding at the Friday evening awards banquet with his brief remarks on our history, delivered as only John Herr could do. This meeting was our second meeting to be organized using a program committee working with Scott Jewell, our convention planner. Some glitches were found and as we move forward the process should become smoother and easier. One common comment was the somewhat crowded conditions. Part of this problem was the result of having the meeting in the location of our previous significant meetings (1st, 25th, and 50th), but more importantly from the large attendance. Had the attendance matched our previous two meetings, the crowding would not have been an issue. I see this as a very positive problem. I hope we have the same crowding problem at the meeting in West Virginia.

As I write this "View From Here", the country is focused on the summer Olympics. Whether you are a fan or not, it is hard to avoid the trials and tribulations of the athletes of the world competing for medals recognizing superiority in their sport. Maybe we should think about our annual meeting as our Olympics. We don't give out medals, but we do recognize outstanding performance by the many awards presented to our members for the presentations given at the meeting. Unlike the Olympics, however, we recognize more than current success. We award career success with the ASB Meritorious Teaching Award. This award, considered the highest award presented by ASB, recognizes the accomplishments of an ASB member for the dedication and mentoring they have provided to future biological scientists of the southeastern

region. If you are a member of ASB and have had a mentor you think deserves this award recognition, please take the time to prepare a portfolio and submit it to the committee for consideration. There are many in our Association who are well qualified to receive this award who are never considered for the sole reason that no one bothered to nominate them by preparing a portfolio. In addition, ASB and affiliated organizations have numerous awards available. Check out the ASB web site and **FOLLOW THE GUIDELINES** to make your presentation eligible for consideration. The process is very straightforward and many deserving presentations are disqualified each year solely on the fact that the guidelines were not followed. Make our next annual meeting your venue to a "Gold Metal" by submitting and winning one of the ASB or affiliated society awards.

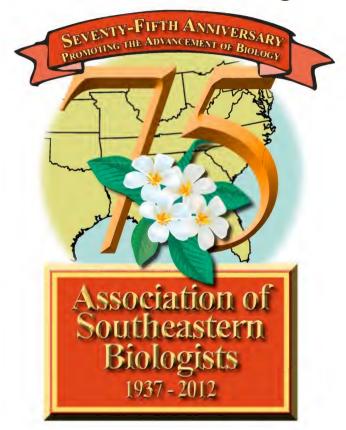
The conversion of Southeastern Biology to an online publication is now complete. Along with this conversion, the transition to Southeastern Naturalist (SENA) as the official journal of ASB is in place. Progress is being made on the new ASB journal with the establishment of an editorial board following the template used as ASB developed Southeastern Naturalist (SENA). The Executive Committee reviewed the title suggestions for this new journal and made the decision that the new journal would be entitled Eastern Biologist. The volunteers for the editorial board will be formulating the scope and vision for the journal and establish timelines and procedures for the publication of the first issue. Members will eventually be able to designate which of the two journals they want to receive as they renew their membership and given an option to receive both by paying an extra fee with their membership dues. I would like to publicly thank the hard work done by Terry Richardson, our membership officer, Tim Atkinson, our treasurer, Joerg-Henner Lotze and the team at Eagle Hill, the publishers of SENA, and Joey Shaw and Ashley Morris of the ASB Publications Committee as they labored to establish this new ASB journal.

As always, it is only with the members of the Affiliate Societies, Patron Members and Vendors that ASB continues as a society. With our meeting at Athens, GA, ASB was fortunate to have two new Patron Members recognized. AST Environmental lead by Terry Richardson and Jeff Selby and Dwayne Wise, Mississippi State University, stepped forward to become the two newest ASB Patron Members. Terry, Jeff and Dwayne are long-time ASB members and continue their support to the Association by joining the Patron Members. ASB thanks them for this pledge of support. We look forward to the continued support of the Patron members and all our affiliate organizations. ASB would also especially thank all the vendors who faithfully return yearly bringing knowledge and experience with tools to enhance our effectiveness as scientists.

As the end of 2012 approaches, I hope that plans are well underway for you, the members, along with your non-member colleagues, graduate students and undergraduate students to meet with us at the 74<sup>th</sup> Annual Meeting. Our meeting will be held 10-13 April 2013 at the Charleston Convention Center in Charleston, WV. The host for this meeting will be Marshal University. This will be a first for our members in West Virginia and we look forward to an excellent meeting.

Humbly and sincerely, Donald H. Roush, President

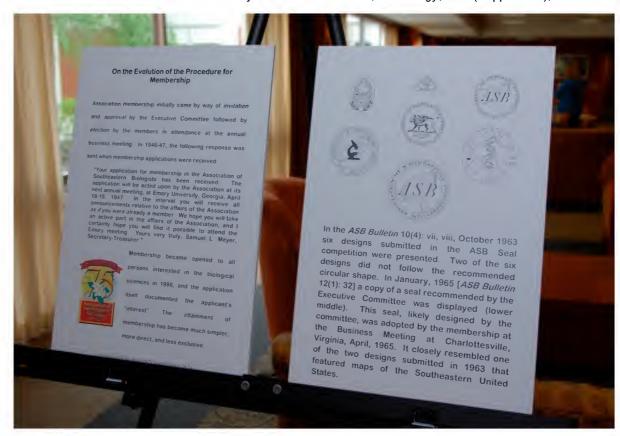
# 73<sup>rd</sup> Annual Meeting of the Association of Southeastern Biologists



The Georgia Center University of Georgia April 4-7, 2012

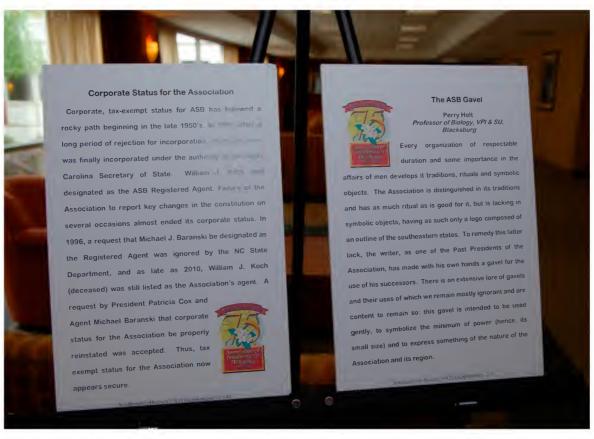
Celebrating 75 Years of Serving the Southeast



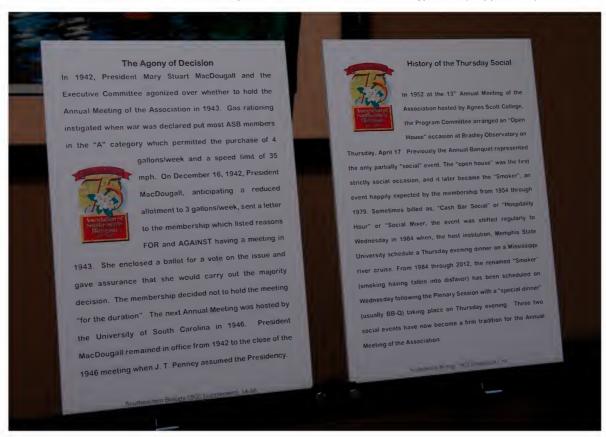


ASB 75<sup>th</sup> Anniversary 433

Some Moments in the 75-Year History of ASB. From J. Herr, SE Biology, 59/2 (Supplement), 2012.







# EVENTS OF THE 2012 ANNUAL MEETING IN ATHENS, GEORGIA

# HOSTED BY THE UNIVERSITY OF GEORGIA, ATHENS, GEORGIA

# ASB MERITORIOUS TEACHING AWARD UNIVERSITY PROFESSOR HONORED

#### PRESENTED TO DR. JENNIFER J. DAVIS SHORTER UNIVERSITY, ROME, GEORGIA

The 2012 Association of Southeastern Biologists Meritorious Teaching Award was presented to **Dr. Jennifer J. Davis**, of Shorter University at the 73<sup>rd</sup> annual meeting of the Association in Athens, Georgia by the award committee chair, Dr. Michael Baranski. This prestigious award is sponsored by Patron Member Carolina Biological Supply Company, Burlington, North Carolina, and includes a plaque, a check for \$1500, and copies of letters supporting the awardee's nomination. The following brief biographical sketch and selected quotes from the letters were drawn from the materials supporting the nomination.

#### Biographical Sketch for Jennifer J. Davis

#### **Education:**

- 1994 Ph.D., Mississippi State University, Starkville, Mississippi Biology. Dissertation topic: Meiotic Chromosome Abnormalities in a Laboratory Stock of the Crane Fly Nephrotoma suturalis. Dr. Dwayne Wise, advisor.
- 1985 M.Ed., West Georgia College, Carrollton, Georgia Special Education, with emphasis in learning disabilities and hearingimpaired education.
- 1971 M.S., Emory University, Atlanta, Georgia Biology. Thesis topic: The Effects of Season, Height, and Location on the Occurrence of Ciliates on the Grass, *Andropogon virginicus*. Dr. William Burbank, advisor.
- 1969 B.A., Elmhurst College, Elmhurst, Illinois Biology.

#### **Employment:**

1976-present. Shorter University (formerly Shorter College). Assistant Professor in 1985.

Associate Professor in 1993. Professor in 2001.

1974-1976. Laboratory technologist at Pesticide Research Lab, University of Florida.

#### Teaching:

At Shorter University: General Biology, Genetics, Histology, Developmental Biology, Cell Biology, Zoology, Bioethics, Physical Science, Science Education, Biodiversity Conservation; Issues in Bioethics and Issues in Biodiversity Conservation for the Integrated Studies Program; Study Abroad Program.

#### **Shorter University Service:**

Chair of Council of Undergraduate Research and Scholarship.

Undergraduate Advisor for biology majors and secondary science majors.

Faculty sponsor of Georgia Theta Chapter of Alpha Chi.

Committees and Councils: General Education, Honors Program, Teacher Certification, Interdisciplinary, 'Teaching, Learning, and Technology Roundtable.'

Faculty Senate, Tenure Committee, and faculty representative to Board of Trustees.

Course proposals for Study Abroad Programs accepted and taught for 1997 and 2001 Mayterm Programs, the Asia Program 2003, and Americas Program 2007.

#### **Professional Affiliations and Activities:**

Member of AAAS, Association of Southeastern Biologists, Hastings Center, Nature Conservancy.

Member of Ethics Committee of Floyd Medical Center, Rome, Georgia, 2003-present.

Member of Education Programs Committee of the Association of Southeastern Biologists (2002-2004), serving as Chair (2003-2004).

Member-at-Large, Association of Southeastern Biologists Executive Committee (2004-2007).

Member, Association of Southeastern Biologists Publications Committee (2005-2008).

Member, Association of Southeastern Biologists Committee for Human Diversity (2008-2010) and Chair (2009-2010).

Vice-President, Association of Southeastern Biologists (2010-2011).

#### **Selected Professional Presentations and Publications:**

April 2011. ASB presentation: 'A General Biology Class Project: Costs and Consequences of the Chernobyl (1986) and Gulf BP Oil Spill (2010)."

February 2009. Presentation to the Floyd Medical Center Ethics Committee, "Genetic Testing."

April 2007. ASB presentation: 'A New Approach for Undergraduates Preparing for Health Science and Counseling Careers.'

April 2004. Organized and participated in a panel discussion, "Teaching Biology in a Study Abroad/Travel Context" as Chair of the ASB Education Committee.

- April 2003. ASB presentation: 'Biodiversity Conservation Taught in the Context of a Study Abroad Program.'
- March 2003. Georgia Academy of Science meeting, 'Fly Project: A genetics laboratory experience.'
- June 2000. Poster session presenting a new course, "Issues in Bioethics," part of a workshop called "Genetics, Bioethics, and Religion" sponsored by the Center for Theology and the Natural Sciences and funded by the John Templeton Foundation.
- 2000. Cuticular sensory receptors on the antenna and maxillary palp of a fly larva, *Nephrotoma suturalis*. Invertebrate Biology 119(3):342-348. (Second author)
- November 1999. Faculty Lectureship Shorter College, "Women's Status in Science, Past and Present."
- March 1999. Presentation: "Women Meeting Science's Challenges in the 20th Century: Pioneers in the 20<sup>th</sup> Century" for the symposium, "Georgia Women Meeting Challenges," sponsored by Georgia Women of Achievement.
- 1999. *Nondisjunction and Aneuploidy* in the Encyclopedia of Genetics, edited by Jeffrey Knight, Salem Press, pp. 433-436.
- 1989-1995. Presentations at Chromosome Conferences and elsewhere concerning research with a laboratory stock of the cranefly, *Nephrotoma suturalis*, which exhibited an elevated level of chromosome abnormalities.

#### Selected Quotes from Letters

"It is hard to put into words the level of appreciation that I feel for such an inspiring figure in my life...."

"She encouraged me never to give up and told me that she knew I could do it. Her belief and encouragement has always meant a great deal to me. Through her interaction with ASB, she has shown me the importance of networking, service to the scientific community and love of knowledge."

"She has shown me how important it is to stand up for what is right or for your ideals you strongly believe in."

"In my opinion the most meaningful quality that [she] possesses is that she has the ability to inspire students to become interested and passionate about the sciences. I believe she accomplishes this because she loves what she does and her excitement and immense interest rubs off on the students around her."

"I am not really sure she understands what a positive impact she has had on my career simply because she is very humble and not the type of individual that seeks recognition. She helped me a great deal, but what impressed me the most from day one [was] her genuine care and devotion to her students. She worked

tirelessly to provide educational experiences for her students and to provide research opportunities in and outside of her classes."

["She] has always demanded the best from her students. One famous rite of passage for biology majors was her genetics course. The traditional fruit fly experiment became more than an exercise in cross-breeding and genotype identification. [She] always made it about the broader aspects of scientific research: good lab techniques, copious and complete lab notes, hypothesis testing, and collaboration between colleagues. I think students realized for the first time taking her genetics course what a hypothesis really is and how to think clearly about scientific research."

"She led a number of study abroad programs.... She took her students to England to visit Darwin's home, to Sweden to trek above the Arctic Circle, to the rainforests of Burma and Ecuador, and to the Galapagos, the birthplace of the idea of natural selection.... She was a kind of mother to the students but never let them forget that she was their teacher and deserving of respect. She never gave up on any student during these trips, even when they acted immaturely or seemed oblivious to the riches of international travel. She had had enough experience to know that students would be profoundly changed by their experiences abroad, even if it didn't happen immediately. And she did everything she could to make sure that change could happen."

[She] in turn was my mentor and confidante. She was always willing to listen to my problems and help me come to practical solutions. She astonished me by how deeply she thought about the teaching profession and how clearly she saw ways to improve the science curriculum and classroom experience of her students. Usually, it was budget restraints and resistance from above that limited her ability to implement changes. But, she has never stopped pushing for change and improvement. For a tiny woman, she has a spine of steel and a wealth of determination. I hope to be such an educator when I reach my final years of teaching."

"She is dedicated, generous, innovative, and truly wise. Hundreds of young women and probably just as many young men owe her an enormous debt for her example and encouragement in getting to where they are today. I know that I am one of them and I will always be thankful for the chance I had to know her and work with her."

"[She] teaches with enthusiasm and with quiet confidence in both her subject matter and in her abilities as a teacher—traits that I found encouraging as a student, but that I now find continually inspiring because, in retrospect, I know that [her] quiet confidence allowed me to develop as a student and to build a sense of self-confidence in my own ability to have ideas and ask questions. To be more specific, [her] ability to distill and present information in a straightforward way (she easily made the work of a 19<sup>th</sup> century monk with an interest in peas relevant to me as a 21<sup>st</sup> century student) was central to my becoming confident enough in my own abilities to consider a career as a scientist."

"[This award] is ASB's highest honor, and because [it] is given based on nominations by former students or colleagues, it will without doubt be awarded to a deserving person—a person who inspired at least one other individual and who likely changed the lives of many. But, and this is what I would I most like to convey, [she] inspired me. She supported my development as a student. She, as my advisor, helped me with that most common question/crisis of young adulthood: what am I going to do with my life! And the memory of her methods in the classroom provides me with a continual example of what is important to convey when working with graduate students or when presenting my own work."



Jennifer J. Davis (left) receives the ASB 2012 Meritorious Teaching Award from committee chair Michael Baranski.

# ASB Lucrecia Herr Outstanding Biology Teacher Award High School Teacher Honored

#### Presented to William (Bill) E. Schuyler Forsyth Central High School, Cumming, Georgia

The 2012 Association of Southeastern Biologists Lucrecia Herr Outstanding Biology Teacher Award was presented to **William (Bill) E. Schuyler** (pronounced Skyler) of Forsyth Central High School at the 73<sup>rd</sup> annual meeting of the Association in Athens, Georgia by the award chair, Dr. W. Michael Dennis. This very prestigious award is sponsored by the ASB Enrichment Fund, and includes a certificate and a check for \$750.00.

#### Biographical Sketch for William (Bill) E. Schuyler

He and his wife (Kelli, a chemistry teacher and his boss) are both teachers at Forsyth and work very much as a team. He teaches courses in AP Biology, Anatomy & Physiology, and Biotechnology/Healthcare Science as part of the STEM Academy.

Bill graduated from Auburn University in 1989 with a bachelor's degree in biology and a minor in pre-veterinary medicine. After graduation, he worked at Emory University and the VA Medical Center as a Research Specialist in Pulmonary Medicine. In conjunction with the Lead Medical Research Doctor, he published papers in medical journals such as American Journal of Medical Science and American Journal of Respiratory Cell Molecular Biology.

In 2000, he graduated from Georgia State University with a master's degree in science education and started his teaching career at Forsyth Central High School. During the last eleven years, he has been honored as the Forsyth Central High School Teacher of the Year (2003), the Georgia Science Teacher of the Year (2004), and this year, he was recognized as the Outstanding Biology Teacher for Georgia (2011).

He has worked with the College Board as a national AP Biology exam grader, and has served as a member of the Governor's Honors Program (GHP) Interview Board for Science at the school, county, and state levels. In addition to his work in the classroom, he is the coach of the Forsyth Central High School's Equestrian Team and Science Olympiad team, as well as a sponsor for the National Honor Society.

His goal for teaching courses in the STEM Academy is twofold: (1) to bring relevant, research-based, hands-on science into the classroom, and (2) to teach rigorous courses developing critical thinking skills and actual science lab experiences so that his students are more successful in pursuing their dreams in science, technology, engineering, and math-related fields.



William (Bill) E. Schuyler (left) receives the 2012 ASB Lucrecia Herr Outstanding Biology Teacher Award from Enrichment Fund chair Michael Dennis.

#### 2012 RESEARCH AWARD RECIPIENTS

#### ASB SENIOR RESEARCH AWARD

The ASB Senior Research Award sponsored by ASB Patron Member Marilyn Pendley, Hudson, North Carolina, was presented by award committee chair Gaven Lawson to **Michael E. Dorcas**, Department of Biology, Davidson College, Davidson, North Carolina, for his manuscript coauthored with John D. Willson, VPI and SU, Blacksburg, VA; Robert N. Reed, U.S. Geological Survey; Ray W. Snow, National Park Service; Michael R. Rochford, University of Florida, Gainesville, FL; Melissa A. Miller, Auburn University, Auburn, AL; Walter E. Meshaka, State Museum of Pennsylvania; Paul T. Andreadis, Denison University, Granville, OH; Frank J. Mazzotti, University of Florida, Gainesville, FL; Christina M. Romagosa, Auburn University, Auburn, AL; and Kristen M. Hart, U.S. Geological Survey, entitled "Severe mammal declines coincide with proliferation of invasive burmese pythons in Everglades National Park." The manuscript will be submitted for publication in the Proceedings of the National Academy of Science with the same coauthors. His paper presentation at the annual meeting was the same, *SE Biology* Abstract 16, 59/3, pages 225 and 226.

Dr. Lawson submitted the following biography of Dr. Dorcas to the Journal Editor.

Mike Dorcas is a Professor in the Department of Biology at Davidson College, Davidson, NC. He received a B.S. (1986) and M.S. (1990) from the University of Texas at Arlington and a Ph.D. from Idaho State University in 1995. Mike is a Fellow of the American Association for the Advancement of Science and has received numerous awards, including the North Carolina Environmental Educator of the Year award in 2004. Mike's research program focuses on the physiology, ecology, and conservation of amphibians and reptiles. His research program is interdisciplinary in nature and relies heavily on collaboration with students. Mike has published numerous book chapters and over 80 articles on the biology of amphibians and reptiles, the most recent of which include students as coauthors. He is involved in numerous research projects including studies of invasive Burmese pythons in Florida and the ecology and conservation of diamondback terrapins in South Carolina. Much of his research in the Davidson area focuses on the effects of urbanization on amphibians and reptiles. He has published seven books, including Invasive Pythons in the United States with JD Willson and Snakes of the Southeast with Whit Gibbons.



Michael Dorcas (left) receives the ASB Senior Research Award from award committee chair Gaven Lawson.

#### **ASB STUDENT RESEARCH AWARD**

The ASB Student Research Award sponsored by ASB Patron Member Martin Microscope Company, Easley, South Carolina, was presented by ASB President Donald H. Roush, to **Lindsay D. Leverett**, Department of Biology, East Carolina University, Greenville, North Carolina for her paper coauthored with Claudia L. Jolls, entitled "Defining cryptic seed heteromorphism in *Packera tomentosa* (Asteraceae) using seed mass characteristics and germination," *SE Biology* Abstract 90, 59/3, page 253.



Lindsay D. Leverett (right) receives the ASB Student Research Award from ASB President Donald H. Roush.

# BROOKS/COLE CENGAGE LEARNING STUDENT RESEARCH AWARD IN AQUATIC BIOLOGY

The Brooks/Cole Cengage Learning Student Research Award in Aquatic Biology sponsored by ASB Patron Member Cengage Learning—Brooks/Cole Publishing Company, Belmont, California, was presented by Adriana A. Nassar to **Madeleine M. Kern**, Department of Biology, Davidson College, Davidson, North Carolina, for her paper coauthored with Adriana A. Nassar, Jackie C. Guzy, and Michael E. Dorcsas, entitled "Oviposition site selection by spotted

salamanders (*Ambystoma macutatum*) in an isolated wetland," *SE Biology* Abstract 118, 59/3, pages 264 and 265.



Madeleine M. Kern (left) receives the Brooks/Cole Cengage Learning Student Research Award in Aquatic Biology from coauthor Adriana A. Nassar.

#### ASB RESEARCH AWARD IN MICROBIOLOGY

No award was made this year.

#### **ASB STUDENT POSTER AWARD**

The ASB Student Poster Award sponsored by ASB Patron Member Cengage Learning—Brooks/Cole Publishing Company, Belmont, California, was presented by award committee member Sarah Noble to **Chance D. Ruder**, Department of Biology, Davidson College, Davidson, North Carolina, for his poster coauthored with Christiana D. Akins, Leigh Anne Harden (University of North Carolina at Wilmington), Steve J. Price, and Michael E. Dorcas, entitled "Effects of

environmental temperature variation on body temperatures and habitat use in free-ranging diamondback terrapins (*Malaclemys terrapin*)," *SE Biology* Abstract P76, 59/3, page 334.



Chance D. Ruder (right) receives the ASB Student Poster Award from award committee member Sarah Noble (center). Pictured with the awardee is poster coauthor Christiana D. Akins (left).

#### THE NORTH CAROLINA BOTANICAL GARDEN AWARD

The North Carolina Botanical Garden Award sponsored by the NCBG, Chapel Hill, North Carolina, was presented by award committee chair Johnny Randall to **Andrea R. Benson**, Department of Biological and Environmental Sciences, University of Tennessee at Chattanooga, for her paper coauthored with Joey Shaw and Jennifer Boyd, entitled "Impacts of large mammal herbivory on *Scutellaria montana* Chapm. in the Tennessee army national guard volunteer training site, Catoosa County, Georgia," *SE Biology* Abstract 23, 59/3, pages 228 and 229.



Andrea R. Benson (left) receives the North Carolina Botanical Garden Award from award committee chair Johnny Randall.

#### **EUGENE P. ODUM AWARD**

The Eugene P. Odum Award sponsored by the Southeastern Chapter of the Ecological Society of America was presented by award committee chair Dean Cocking to **Keri M. Goodman**, Odum School of Ecology, The University of Georgia, Athens, Georgia, for his paper coauthored with Mark E. Hay, School of Biology, Georgia Institute of Technology, Atlanta, Georgia, entitled "Activated chemical defenses suppress herbivory on freshwater red algae," *SE Biology* Abstract 146, 59/3, page 275. (No photograph was taken.)

An Honorable Mention was also awarded by committee chair Dean Cocking to **Kyle A. Palmquist**, Department of Biology, University of North Carolina, for her paper coauthored with Robert K. Peet, and Alan S. Weakley, entitled "Dramatic declines in small-scale species richness in longleaf pine (*Pinus palustris*) savannas," SE Biology Abstract 85, 59/3, page 251.



Kyle A. Palmquist (left) receives an Eugene P. Odum Award Honorable Mention from award committee chair Dean Cocking.

#### ELSIE QUARTERMAN-CATHERINE KEEVER AWARD

The Elsie Quarterman-Catherine Keever Award sponsored by the Southeastern Chapter of the Ecological Society of America was presented by chapter chair David Vandermast to **Anne B. Cubeta**, Department of Biology, College of Charleston, Charleston, South Carolina, for her poster coauthored with Joel M. Gramling, Department of Biology, The Citadel, Charleston, South Carolina, entitled "Using species distribution modeling to develop a restoration framework for *Lindera melissifolia* in the Southeastern Coastal Plain," *SE Biology* Abstract P3, 59/3, pages 307 and 308.



Anne B. Cubeta (left) receives the Elsie Quarterman-Catherine Keever Award from chapter chair David Vandermast.

# BOTANICAL SOCIETY OF AMERICA SOUTHEASTERN SECTION STUDENT AWARDS

The award committee chair, Zack Murrell, reported that the award committee for the award, sponsored by the Southeastern Section of the Botanical Society of America, made no awards this year.

#### THE UNIVERSITY OF SOUTH CAROLINA HERBARIUM AWARD

The award committee chair, John Nelson, reported that the award committee for the award, sponsored by the A. C. Moore Herbarium at USC, made no awards this year.

#### ASB GRADUATE STUDENT TRAVEL AWARDS

The following graduate students received travel awards from ASB to attend the annual meeting in Athens, Georgia. Selections were made by the ASB Graduate Student Support Award Committee Members J. Richard Carter (chair), Michael Gangloff, and Lisa Kelly.

Charles Battaglia – University of Louisiana, Monroe, Louisiana
Barbara Biebinger – Troy University, Troy, Alabama
Lisa Brown – University of Louisiana, Monroe, Louisiana
Indrani Dey – Troy University, Troy, Alabama
Bijay Niraula – Troy University, Troy, Alabama
Evelyn Reategui-Zirena – Troy University, Troy, Alabama
Matthew Reid – University of Louisiana, Monroe, Louisiana
Jennifer Stanley – North Carolina State University, Raleigh, North Carolina

#### SOUTHERN APPALACHIAN BOTANICAL SOCIETY AWARDS

Presented at the Annual SABS/BSA breakfast meeting on April 6, 2012.

#### **Student Presentation Awards**

The Student Presentation Awards were established in 2011 to reward outstanding undergraduate or graduate student botanical presentations at the annual Association of Southeastern Biologists meeting. Awards are presented in two categories: Student Contributed Paper Award and Student Poster Award. Applicants must be current members of SABS. Each award includes an honorarium of \$150.00.

- Paper Presentation Andrea R. Benson, Department of Biological and Environmental Sciences, University of Tennessee at Chattanooga, for her paper coauthored with Joey Shaw and Jennifer Boyd, entitled "Impacts of large mammal herbivory on Scutellaria montana Chapm. in the Tennessee army national guard volunteer training site, Catoosa County, Georgia," SE Biology Abstract 23, 59/3, pages 228 and 229.
- Poster Presentation Jennifer S. Stanley, Department of Plant Biology, North Carolina State University, Raleigh, North Carolina, for her poster coauthored with Alexander Krings, Jon M. Stucky, and Richard R. Braham, entitled "Guide to the vascular flora of Picture Creek Diabase Barrens (Granville County, North Carolina)," SE Biology Abstract P56, 59/3, page 327.

#### **Earl Core Student Research Award**

Dr. Earl Core was a major force in the founding of the Southern Appalachian Botanical Club in 1936. The annual Core Student Award was established by the

society to provide financial assistance in support of student research projects in plant taxonomy, systematics, and ecology. **Matthew Hansen**, Department of Biological Sciences, Towson University, Towson, Maryland, was awarded a \$300.00 grant to assist with his research project on genetic diversity and gene flow in tree-of-heaven. His research advisor is Roland P. Roberts. At the annual meeting, Matthew presented a paper coauthored with Roland P. Roberts, entitled "A demonstration of software packages used for data analysis in population genetics: unraveling population genetic structure and patterns of gene flow in the exotic invasive *Ailanthus altissima* along the I-95 corridor," *SE Biology* Abstract 79, 59/3, page 249.

#### Richard and Minnie Windler Award

The Richard and Minnie Windler Award was established in 1990 at the annual meeting of the SABS by Dr. Donald R. Windler of Towson University as a memorial to his parents. The award is presented annually to the author or authors of the best systematic botany paper published in *Castanea* during the previous year. The eligible papers may fall into the broad area of plant systematics, including floristic, experimental, revisionary, and nomenclatural studies.

An award of \$500 was presented to **James A. Schrader** and **William R. Graves** for their article "Taxonomy of *Leitneria* (Simaroubaceae) resolved by ISSR, ITS and morphometric characterization," which appeared in the September 2011 issue of *Castanea*.

#### Elizabeth Ann Bartholomew Award

The society annually presents the award in memory of Elizabeth Ann Bartholomew's untiring service to the public, to plant systematics, and to the organization. The award is presented to individuals who have also distinguished themselves in professional and public service that advances our knowledge and appreciation of the world of plants and their scientific, cultural, and aesthetic values, or exceptional service to the society.

**Audrey Mellichamp**, the recently retired Managing Editor of *Castanea* was the recipient of the 2012 award. Audrey first became the Managing editor in 1982. During her 30 years of service to the society, she made sure authors had their articles in order for publication. A detailed presentation of her accomplishments can be found in the September 2012 issue of *Castanea*.

#### **Change of SABS Office of President**



Incoming President of SABS Wendy Zomlefer (left) receives the gavel from now Past President Lytton Musselman.



Outgong President and now Past President of SABS Lytton Musselman (left) receives a plaque of appreciation from Conley K. McMullen.

#### **Newly Installed President of SABS**



Dr. Wendy Zomlefer

# SOCIETY OF WETLAND SCIENTISTS SOUTH ATLANTIC CHAPTER

#### STUDENT TRAVEL AWARD

Chapter Secretary/Treasurer Dr. William H. Conner reported that **Matthew L. Reid** was the recipient of a student travel award to the annual ASB meeting from the South Atlantic Chapter of the Society of Wetland Scientists. Award recipients must be currently enrolled students, conduct research pertaining to wetland science, and present their research at the ASB annual meeting. Matthew was presented with a check for \$100.00 by chapter member Dr. Dianne De Steven at the chapter luncheon on Thursday, April 5, 2012.

Matthew L. Reid, Department of Biology, University of Louisiana, Monroe, for his paper coauthored with Davis W. Pritchett (University of Arkansas at Fort Smith) and Joydeep Bhattacharjee, entitled "Twenty-seven years of bottomland hardwood forest succession," *SE Biology* Abstract 88, 59/3, pages 252 and 253.



Matthew L. Reid (right) receives the SWS-SA Chapter Student Travel Award from Dianne De Steven.

# BETA BETA NATIONAL BIOLOGICAL HONOR SOCIETY SOUTHEASTERN REGION

#### **OUTSTANDING PAPER AND POSTER AWARDS FOR 2012**

At the 55<sup>th</sup> Tri-Beta Annual Meeting held with the 73<sup>rd</sup> ASB Annual Meeting, Steven Coggin, Southeastern Region District I Director, and Christi Magrath, Southeastern Region District II Director, presented the following awards.

# Southeastern District I Paper Session Frank J. Brooks Paper Award Winner

**Tyler Sloan**, Sigma Psi, Florida Institute of Technology, Melbourne, Florida. "The effects of temperature on the feeding kinematics and behavior of two trophically distinct invasive-fish species: the specialist *Belonesox belizanus* and the generalist *Cichlasoma urophthalmus*," *SE Biology* Abstract 59/3, page 390.



SE District I Brooks Paper Award. From left to right: Tyler Sloan, 1<sup>st</sup> place winner; Karolyn Burns, 2<sup>nd</sup>; Ashley E. Schiffmacher and Christopher Bessette, 3<sup>rd</sup>; and Michael Hull, H.M.

#### Combined Southeastern Districts I and II Plus District II Paper Sessions Frank J. Brooks Paper Award Winner

**Kathryn Sinclair**, Psi Beta, James Madison University, Harrisonburg, Virginia. "Phenotypic and molecular characterization of *Drosophilia melanogaster* Rho A mutants," *SE Biology* Abstract 59/3, page 393.



Combined SE Districts I and II plus District II Brooks Paper Award. From Left to right: Kathryn Sinclair, 1<sup>st</sup> place winner; Amy Clippinger, 2<sup>nd</sup>; Neena Alex, 3<sup>rd</sup> (not pictured); Terry Langfitt, H.M. (not pictured).

## Southeastern District I Poster Session John C. Johnson Poster Award Winner

**Kim Rigano**, Sigma Psi, Florida Institute of Technology, Melbourne, Florida. "Visual capabilities of yellow ratsnakes (*Elophe obsoleta quadrivittata*) as predators of the threatened Florida scrub-jay (*Aphelocoma coerulescens*)," *SE Biology* Abstract 59/3, page 400.



SE District I Johnson Poster Award. From left to right: Kim Rigano, 1<sup>st</sup> place winner; Caitlin Cole, 2<sup>nd</sup>; Ann Wassick, 3<sup>rd</sup>; and Matthew J. Cicanese, H.M.

## Southeastern District II Poster Session John C. Johnson Poster Award Winner

**Joshua Onyango**, Lambda Epsilon, Oakwood University, Huntsville, Alabama, **Ryan S. Lonsen** and **Ben D. Philpot**, Tau lota, University of North Carolina, Chapel Hill, North Carolina. "Presynaptic NMDA receptors do not promote GABA release in the CA1 region of the hippocampus and L 2/3 of the visual cortex," *SE Biology* Abstract 59/3, page 405.



SE District II Johnson Poster Award. From left to right: Joshua Onyango, 1<sup>st</sup> place winner (not pictured); Katherine Elson, 2<sup>nd</sup>; Mfoniso Umoren, 3<sup>rd</sup>; and Steven Stracener, H.M.

#### THE PEMBROKE GROUP AT ATHENS, GEORGIA

Pictured are faculty and students of the Department of Biology, University of North Carolina, Pembroke, who attended the 73<sup>rd</sup> annual meeting of ASB in Athens, Georgia.



From left to right: Andrew Sutton (undergraduate student), Zachary Barthel (undergraduate student), Dr. Bonnie Kelley, Dr. Leon Jernigan, Dr. Lisa Kelly, Dr. Debby Hanmer, Dr. Rita Hagevik, and Dr. Andrew Ash.

#### ASB EXECUTIVE COMMITTEE MEMBERS AT THE ANNUAL MEETING IN ATHENS, GEORGIA



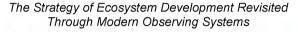
Back row standing from left to right: Donald Roush, Terry Richardson, Zack Murrell, Tim Atkinson, Roland Roberts, William Ensign, John Herr, James Caponetti, and Conley McMullen.

Front row seated from left to right: Sarah Noble, Patricia Cox, Ashley Morris, and Rebecca Cook.

# THE ASB PLENARY SESSION WEDNESDAY, APRIL 4, 2012

The Plenary Session was opened by ASB President Dr. Donald H. Roush at 7:30 P.M. EDT. The audience was welcomed to the University of Georgia, Athens by Dr. Gary Barrett, former Head of Ecology, and by Dr. David Lee, Vice President for Research and the Executive Vice President of the University of Georgia Research Foundation.

ASB President-Elect Dr. Zack Murrell introduced the featured plenary speaker **Dr. David S. Schimel**, Chief Science Officer and Principal Investigator for the National Ecological Observatory Network (NEON). The title of his talk was





Dr. Donald H. Roush



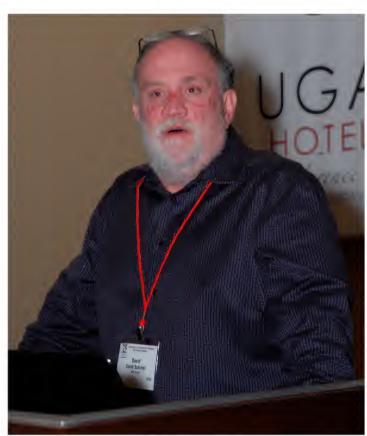
Dr. Gary Barrett







Dr. Zack Murrell



Dr. David S. Schimel

### Wednesday Evening Plenary Welcoming Reception





# Wednesday Evening Plenary Welcoming Reception















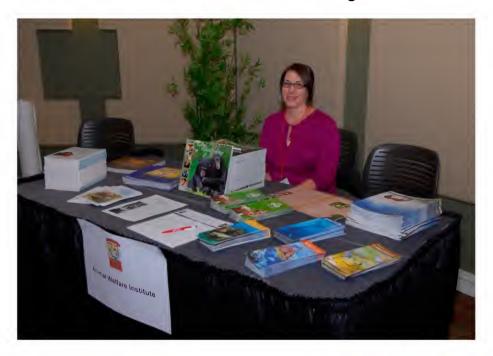














# Thursday ASB Past Presidents' Breakfast



# Thursday Workshops



Associated Microscope



Biopac Systems, Inc.

# Thursday Workshop



Bio-Rad Laboratories

### **Thursday Human Diversity Luncheon**



# Society of Herbarium Curators Thursday Lunch





# **Thursday Silent Auction**





### ASB THURSDAY PAPER PRESENTATIONS









### **ASB THURSDAY PAPER PRESENTATIONS**

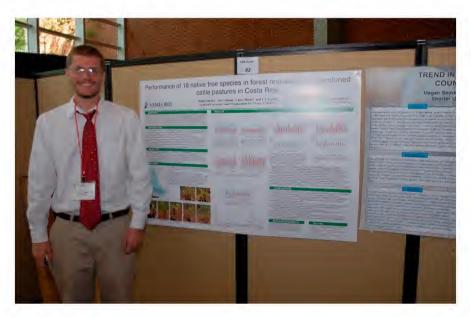


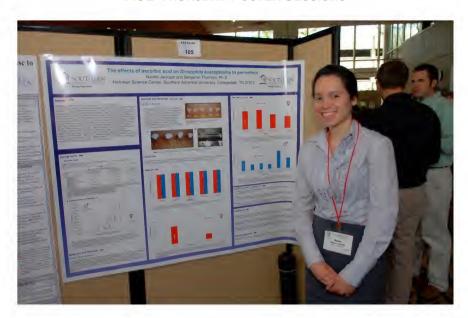


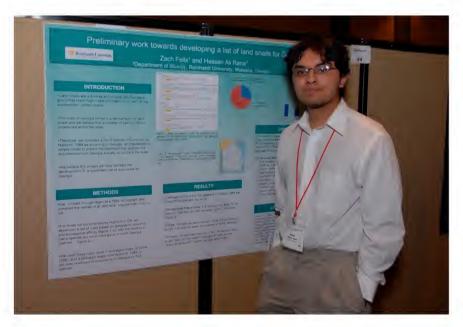


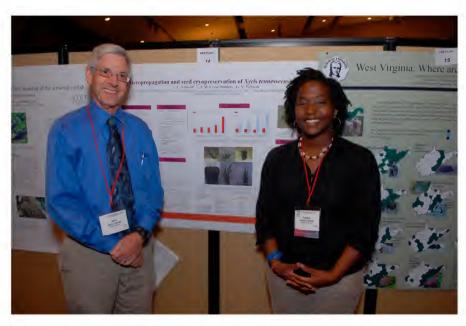




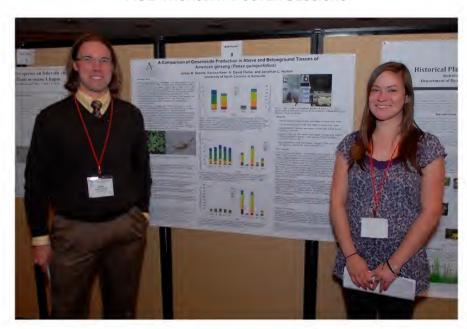
















Ashley Morris

#### Symposium I

Thursday Afternoon, April 5<sup>th</sup>

Next Generation Approaches to Phylogenetics and Phylogeography in Southeastern Systems

Session Chair and Speaker: Ashley Morris



Zack E. Murrell



Emily L. Gillespie



Kevin S. Burgess



Joey Shaw



Matthew Hansen



Roland P. Roberts

#### **Symposium I Presentations**

- 1:30 pm 75 **Zack E. Murrell**. The future of plant systematics. Appalachian State University, NC.
- 2:00 pm 76 **Emily L. Gillespie**. A molecular phylogenetics primer for 21<sup>st</sup> century taxonomy. Wake Forest University, NC.
- 2:30 pm 77 **Kevin S. Burgess**. Barcoding local floras: potential challenges and future applications. Columbus State University, GA.
- 3:00 pm 78 **Joey Shaw, Hayden Shafer and Peggy Kovach**. Chloroplast DNA sequence utility for inference of low-level or phylogeographic relationships among plants. University of Tennessee at Chattanooga, TN.
- 4:00 pm 79 **Matthew Hansen and Roland P. Roberts**. A demonstration of software packages used for data analysis in population genetics: unraveling population genetic structure and patterns of gene flow in the exotic invasive *Ailanthus altissima* along the I-95 corridor. Towson University, MD.
- 4:30 pm 80 **Ashley B. Morris.** Plant phylogeography 2.0: innovative approaches for a stagnating field. Middle Tennessee State University. TN.

#### Symposium I Summary

The ASB 2012 meeting saw the first ASB symposium dedicated to modern molecular methods in systematics and population ecology. The primary objectives were to introduce the audience to commonly used tools of the trade in plant systems, both with respect to lab methods and analytical approaches, and to provide guidance on some of the newer, cutting-edge approaches in the field. Our diverse array of speakers provided suggestions for appropriate molecular marker choice for low-level taxonomic studies, the potential pros and cons of DNA barcoding approaches in systematics and ecology, analytical approaches to phylogeny reconstruction, standard and novel programs for analyzing population genetic data, and new directions for plant phylogeography. Through this symposium, we hope to encourage more active participation of the molecular evolutionary community in future ASB meetings.

### ASB THURSDAY NIGHT DINNER





### ASB THURSDAY NIGHT DINNER









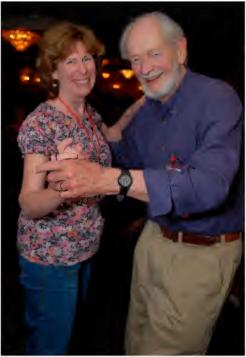














### FRIDAY SABS/BSA BREAKFAST





### FRIDAY SABS/BSA BREAKFAST





### FRIDAY ASB PATRONS AND EXHIBITORS BREAKFAST





#### FRIDAY ASB BUSINESS MEETING



FRIDAY BETA BETA BETA JOINT BUSINESS MEETING



### FRIDAY ASB EDUCATION COMMITTEE LUNCHEON





### FRIDAY ESA LUNCHEON AND BUSINESS MEETING





### FRIDAY SHC EXECUTIVE BOARD MEETING



FRIDAY SHC BUSINESS MEETING



#### FRIDAY SABS/BSA BOTANY STUDENTS RECEPTION



FRIDAY BETA BETA JOINT SESSION AWARDS CEREMONY



# FRIDAY ASB PAPER PRESENTATIONS









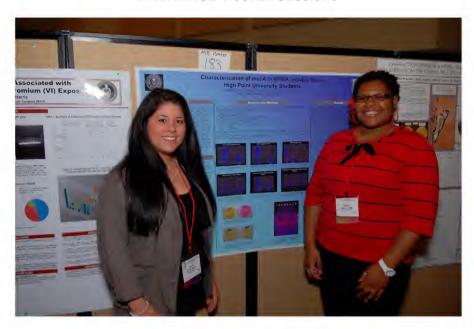
### FRIDAY ASB PAPER PRESENTATIONS

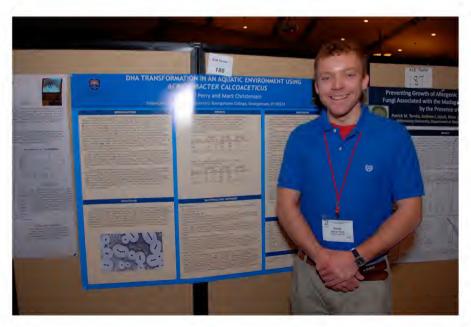


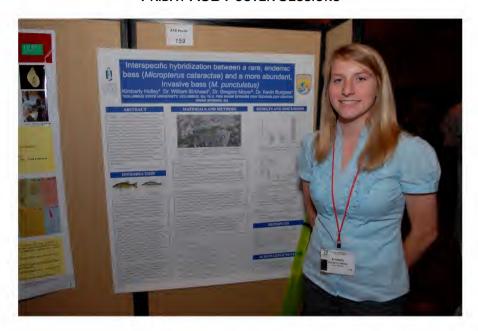


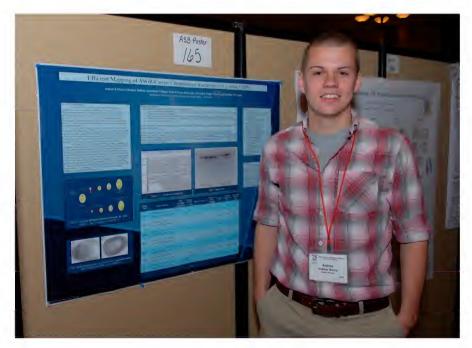


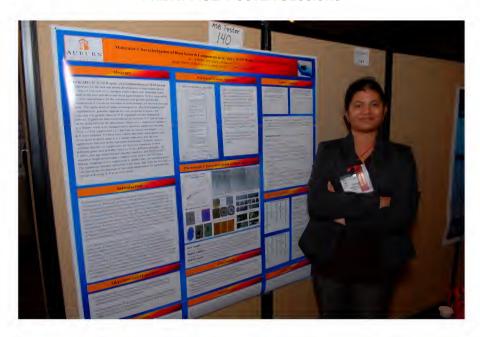


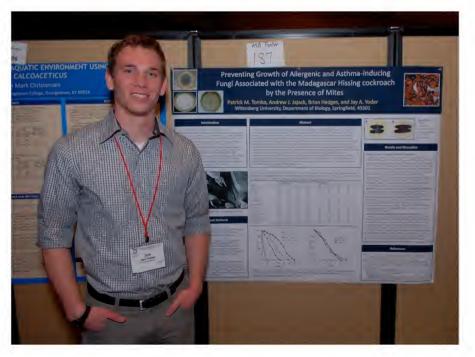


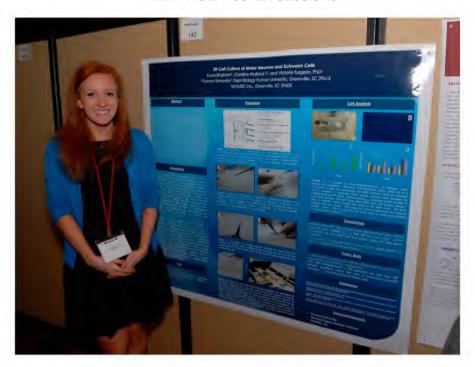


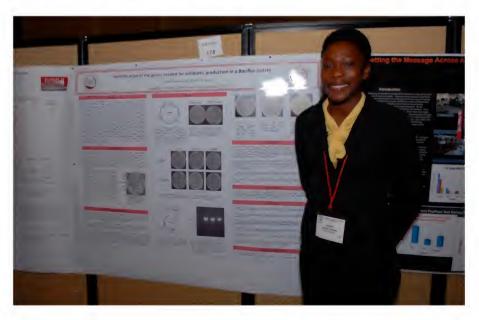












# FRIDAY BETA BETA BETA PAPER PRESENTATIONS

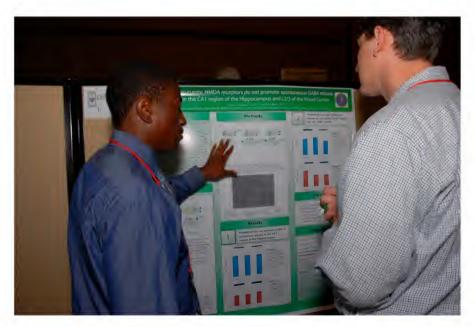


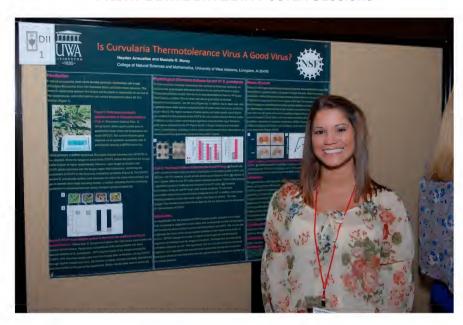




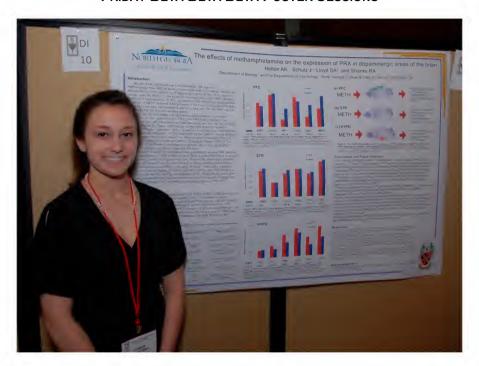


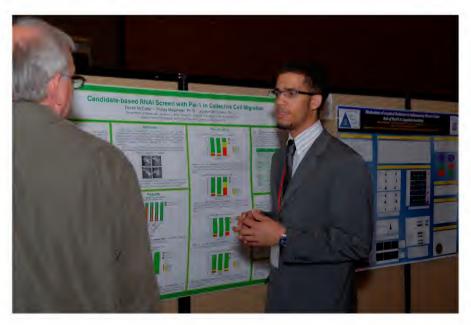


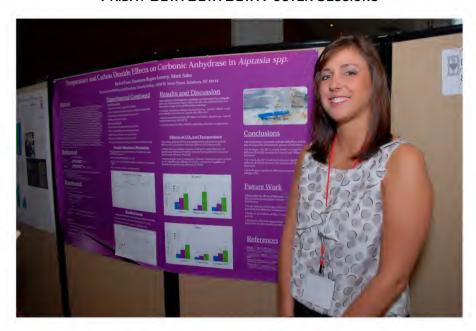


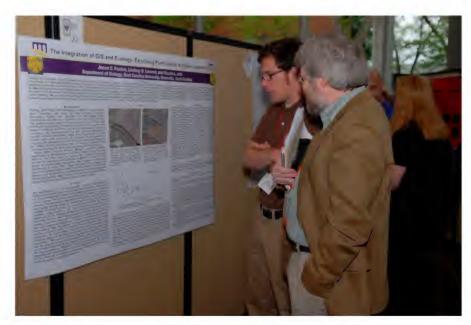












#### SYMPOSIUM II

#### Friday Morning, April 6<sup>th</sup>

#### A New Vision for Undergraduate Biology Education

#### Session Chair and Speaker: Nicole Turrill Welch

#### Symposium II Speakers



Louis J. Gross



Paula P. Lemons



Peggy Brickman



J. Steve Oliver



Kathrin F. Stanger-Hall



Nicole Turrill Welch

#### **Symposium II Presentations**

- 8:00 am 139 **Louis J. Gross**. The vision of *Vision and Change*. University of Tennessee, Knoxville, TN.
- 8:30 am 140 Paula P. Lemons¹ and Luanna B. Prevost². What type of multiple-choice questions help students practice the process of science? A study of student cognition during multiple-choice testing.¹The University of Georgia, GA, ²Michigan State University, MI.

9:00 am 141 **Peggy Brickman**. Media-savvy scientific literacy: developing critical evaluation skills by investigating scientific claims. University of Georgia, GA.

- 9:30 am 142 **J. S. Oliver, Georgia W. Hodges, James N. Moore and Tom P. Robertson**. Teaching cellular processes to high school students using modules based on 3-d computer animations. University of Georgia, GA.
- 10:30 am 143 **Kathrin F. Stanger-Hall**. Interdisciplinary thinking in biology. University of Georgia, GA.
- 11:00 am 144 Nicole T. Welch<sup>1</sup>, Nancy J. Pelaez<sup>2</sup>, Charlene D'Avanzo<sup>3</sup> and Charles W. Anderson<sup>4</sup>. Helping faculty embrace the vision of *Vision and Change*. <sup>1</sup>Mississippi University for Women, MS, <sup>2</sup>Purdue University, IN, <sup>3</sup>Hampshire College, MA, <sup>4</sup>Michigan State University, MI.

#### Symposium II Summary

The American Association for the Advancement of Science called for a revolution in undergraduate biology education with its 2011 Vision and Change initiative. Vision and Change encourages educators to help their students achieve success in six core competency areas. These core competency areas are - the ability to (1) apply the process of science, (2) use quantitative reasoning, (3) use modeling and simulation, (4) tap into the interdisciplinary nature of science, (5) communicate and collaborate with other disciplines, and (6) understand the relationship between science and society. Our speakers shared teaching strategies and tools aligned with these six core competency areas, as well as evidence of their effectiveness. Dr. Lou Gross, University of Tennessee and a member of the Vision and Change Advisory Board, opened the session describing the development and goals of the initiative. Drs. Paula Lemons, Peggy Brickman, J. Steve Oliver, and Kathrin Stanger-Hall, all of the University of Georgia, shared their development, use, and assessment of teaching techniques/activities, emphasizing student cognition during multiple-choice testing, critical evaluation of scientific claims in the media, cellular processes taught with 3-D animations, and interdisciplinary thinking, respectively. Dr. Nicole Turrill Welch summarized with a report of biology faculty outcomes from, and concerns about, the process of course transformation. Our symposium and years of supporting research from many others show that student understanding of biological concepts increases when instructors employ active-learning methods, demonstrate the process by which textbook content is generated, and permit students to discover how and why course content is important to them. Faculty should embrace the vision of Vision and Change, and slowly, one lecture or activity at a time, incorporate more active-learning into their courses.



Alan P. Covich

### Symposium III

Friday Afternoon, April 6<sup>th</sup>

Lakes as Sentinels of Landscape Change and Biodiversity in the Southeast

Session Chair and Speaker: Alan P. Covich



Matthew N. Waters



Stephen W. Golladay



Stephen D. Shivers



Joseph M. Dirnberger



Alan E. Wilson



Dylan C. Grippi

#### **Symposium III Presentations**

1:45 pm 188 Matthew N. Waters<sup>1</sup>, Stephen W. Golladay<sup>2</sup> and Chase H. Patrick<sup>1</sup>. The effects of land use and allochthonous inputs on primary producer community structure in a large, shallow reservoir: evidence from lake sediments. <sup>1</sup>Valdosta State University, GA, <sup>2</sup>Joseph W. Jones Ecological Research Center, GA.

- 2:05 pm 189 Stephen W. Golladay<sup>1</sup>, Alan P. Covich<sup>2</sup>, Julie McEntire<sup>2</sup>, Stephen Shivers<sup>2</sup> and Stephen Opsahl<sup>3</sup>. Reservoirs as functional elements of rivers: Lake Seminole, GA as a case study. <sup>1</sup>J.W. Jones Ecological Research Center, GA, <sup>2</sup>University of Georgia, GA, <sup>3</sup>USGS Texas Water Science Center, TX.
- 2:25 pm 190 Stephen D. Shivers<sup>1</sup>, Stephen P. Opsahl<sup>2</sup>, Alan P. Covich<sup>1</sup> and Stephen W. Golladay<sup>3</sup>. The diel and seasonal effects of submerged aquatic vegetation on nutrient dynamics, nutrient storage, and organic carbon bioavailability in a southeastern reservoir. <sup>1</sup>University of Georgia, GA, <sup>2</sup>United States Geological Survey, <sup>3</sup>Joseph W. Jones Ecological Research Center, GA.
- 2:45 pm 191 **Joseph M. Dirnberger**. Linking climatic extremes to episodes of small-cell phytoplankton dominance in a large southeastern reservoir. Kennesaw State University, GA.
- 3:20 pm 192 Alan E. Wilson<sup>1</sup>, RajReni B. Kaul<sup>2</sup>, Michael F. Chislock<sup>1</sup> and Gina L. Curvin<sup>3</sup>. Towards an improved understanding of the factors mediating toxic cyanobacterial blooms throughout the southeast. <sup>1</sup>Auburn University, AL, <sup>2</sup>University of Georgia, GA, <sup>3</sup>Alabama Department of Environmental Management, AL.
- 3:40 pm 193 **Dylan C. Grippi, Stuart K. Auld and Meghan A. Duffy**. Ecological and evolutionary responses of zooplankton to parasite epidemics. Georgia Institute of Technology, GA.
- 4:00 pm 194 Alan P. Covich, John C. Bergstrom, Rebecca L. Moore and Douglas A. Patton. Savannah River reservoirs are sentinels for forecasting loss of ecosystem services. University of Georgia, GA.

#### Symposium III Summary

The symposium on "Lakes as Sentinels of Landscape Change and Biodiversity in the Southeast" included seven presentations on a wide range of topics associated with the ecology of large regional reservoirs and lakes. Matthew N. Waters, Stephen W. Golladay and Chase H. Patrick reported on the effects of land use and terrestrial inputs of nutrients on primary-producer community structure in Lake Seminole. Evidence from lake sedimentary cores documented the early history of the lake. Accumulation of nutrients and organic carbon affected rates of change in the distributions of dominant species of submerged plants that were established over time.

The second presentation on Lake Seminole by Stephen W. Golladay, Alan P. Covich, Julie McEntire, Stephen Shivers, and Stephen Opsahl emphasized that this reservoir's foodweb provides an important function in mediating the effects of high nutrient from three inflowing rivers. Extensive beds of Hydrilla, a non-native submerged macrophyte, take up and store nutrients within the lake during the growing season and influence the annual cycle of organic carbon bioavailability, primary production for grazers, as well as the downstream outflow of nutrients.

Joseph M. Dirnberger discussed the importance of long term data and climatic extremes relative to episodes of cyanobacterial and diatom dominance in Lake Allatoona. Warm water and low rainfall in 1993 and 2007 coincided with shifts to nitrogen limitation during those years. Changes in nutrient quality occurred but no changes in algal bloom biomass were observed.

Alan E. Wilson, RajReni B. Kaul, Michael F. Chislock and Gina L. Curvin presented their data on environmental factors that mediate the growth of toxic cyanobacterial blooms in 235 southeastern freshwaters during 2008-2010. Some cyanobacteria produce potent secondary metabolites, such as microcystin, that can poison drinking water supplies and understanding their distribution is essential as warming and eutrophication increase the distribution of various cyanobacteria.

Dylan C. Grippi, Stuart K. Auld, and Meghan A. Duffy discussed the ecological and evolutionary adaptive responses of zooplankton populations to parasite infections that influence the effectiveness of these important grazers. Based on weekly samples from ponds in Athens, they documented how *Ceriodaphnia dubia*, a widespread Cladoceran species, was affected by the bacterial parasite, *Pasteuria ramose*, that castrates its host. Following an initial decline, the zooplankton recovered 48 days after the epidemic started, thus indicating some adaptive capacity.

Alan P. Covich, John C. Bergstrom, Rebecca L. Moore, and Douglas A. Patton discussed the values of ecosystem services provided by the series of three large reservoirs on the Savannah River. This series of reservoirs can be effectively managed for flood control and in sustaining ecological flows during prolonged dry periods. Although the recreational and hydroelectric benefits are well defined, values for sustaining biodiversity of freshwater mussels and fishes still need study because of their complex life histories. The proposed deepening of the lower sections of the Savannah River for increased shipping activities could result in more introductions of detrimental, non-native species.

With research findings from the reservoir and river portions of the regulated Savannah River system, Oscar Flite moderated a panel discussion on the benefits and challenges of using southeastern lakes as sentinel systems. Those topics included: necessary monitoring parameters, appropriate spatial and temporal sampling resolution, the uniqueness of the single "sampling port" that reservoirs provide, integration of the river systems below reservoirs, and the importance of a holistic limnological approach (biology, chemistry, physics, and geology) to capture the effects of biodiversity and landscape changes within these unique systems.

## FRIDAY NIGHT AWARDS BANQUET RECEPTION





# RESOLUTION OF APPRECIATION TO THE UNIVERSITY OF GEORGIA AND THE ORGANIZERS OF THE 73<sup>RD</sup> ANNUAL MEETING OF THE ASSOCIATION OF SOUTHEASTERN BIOLOGISTS

**WHEREAS**, the University of Georgia did agree to host the 75<sup>th</sup> Anniversary Celebration of the Association of Southeastern Biologists during the 73<sup>rd</sup> Annual Meeting on 4 April through 7 April, 2012, in Athens, GA; and

WHEREAS, Local Arrangement Committee of the University of Georgia, especially Stephanie Pearl of the Department of Plant Biology, did an outstanding job coordinating with the ASB Convention Manager and program committee; and

WHEREAS, Joey Shaw of the University of Tennessee at Chattanooga for planning field trips; Nicole Welch of Mississippi University for Women, Howie Neufeld and Zack Murrell from Appalachian State University, Patricia Cox of Tennessee Valley Authority, Brian Toone of Samford University, and Scott Jewell for assembling the program, Brian Toone of Samford University for assisting in the submission of Abstracts and Mark Suggs of Appalachian State University for assisting with program formatting; John Herr of University of South Carolina and Zack Murrell for compiling 75th Anniversary materials for exhibits: Christi Magrath of Troy University for coordinating the activities of Beta Beta Beta, Tim Atkinson of Carolina Biological Supply Company for assisting with membership and registration, Ashley Morris of Middle Tennessee State University for her excellent work on the ASB web and social media pages, Marilyn Pendley of Caldwell Community College for organizing the volunteers; Patricia Cox, Kim Tolson, Patricia Parr, Diane Nelson, Bonnie Kelley, and Eloise Carter for organizing the silent auction and Scott Jewell, A2Z Convention Services, for handling the annual meeting budget, commercial exhibits and workshops, special sessions. advertising, on-line registration, on-site registration. accommodations, and transportation; and

WHEREAS, the affiliate societies, American Society of Ichthyologists and Herpetologists, Southeastern Division, TriBeta Southeastern District I, TriBeta Southeastern District II, Southeastern Section of the Botanical Society of America, Southeastern Chapter of the Ecological Society of America, Society of Herbarium Curators, South Atlantic Chapter of the Society of Wetland Scientists, Southern Appalachian Botanical Society, Southeastern Society of Parasitologist, Southeastern Fishes Council, and National Association of Biology Teachers were in attendance and contributed to paper and poster sessions, workshops, and symposia; our patron members, A2Z Convention Services, Associated Microscopes, AST Environmental, Breedlove, Dennis and Associates, Carolina Biological Supply Company, Cengage Learning, Dwayne Wise, Martin Microscopes, Marilyn Pendley, Southeastern Naturalist, and Tim Atkinson; and

WHEREAS, the citizenry of Athens, Georgia cooperated to welcome the Association of Southeastern Biologists to the City of Athens, Georgia; and

**WHEREAS**, the students of University of Georgia and other Southeastern schools volunteered to assist with the production of the 73<sup>rd</sup> Annual Meeting; therefore, be it

**RESOLVED**, that the members of the Executive Committee of the Association of Southeastern Biologists give their sincere thanks and appreciation to all involved in making this an excellent and memorable Annual Meeting that resulted from the cumulative efforts of these individuals and organizations.

03

#### ASB PATRON TESTIMONIAL

"We at BDA consider it a privilege to be associated with the Association of Southeastern Biologists as a Patron Member. Being the premier organization of Biologists for the greater Southeastern US, ASB provides the unifying point of contact for biologists of all interests. ASB provides the main forum for students to present their research, and for all biologists to interact, no matter what their experience level. Many of our company's scientists have been ASB members and some have come to us through our affiliation with ASB. Any individual or company whose interest or business is in the natural resources field could do no better than support ASB as a Patron Member."

#### **News of Biology in the Southeast**

Riccardo Fiorillo—News Editor School of Science and Technology Georgia Gwinnett College Lawrenceville, GA 30043 678-464-9918: rfjorill@ggc.edu

#### **ABOUT PEOPLE AND PLACES**

#### **TENNESSEE**

The College of Arts & Sciences at the University of Tennessee, Knoxville announced on July 19, 2012, that Daniel Simberloff, the Gore-Hunger Professor of Environmental Studies, Department of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, has won the 2012 Ramon Margalef Award for Ecology. The award is presented annually by the Government of Catalonia, an autonomous region in northeast Spain, "to recognize an exceptional scientific career or discovery in the field of ecological science". Dr. Simberloff, who in May, 2012 became the University of Tennessee's third faculty member in history to be elected to the National Academy of Sciences, is being honored for "his contributions to the observation and theoretical analysis of the structure and dynamics of ecological communities, and for the application of these studies to conservation biology."

# ASSOCIATION OF SOUTHEASTERN BIOLOGISTS 2012 TREASURER'S REPORT FY 1 JANUARY-31 DECEMBER 2011

I.	BEGINNING BALANCE			\$28,170
II.	RECEIPTS Southeastern Biology Receipts Membership Dues Enrichment Fund Receipts Contributions ASB Annual Meeting Receipts Registration Exhibits	\$25,600 \$3,925 \$118,557 \$15,650	\$25,600 \$3,925 \$134,207	\$163,732
III.	TOTAL RECEIPTS & BEGINNING	BALANCE		\$191,902
IV.	DISBURSEMENTS Office Expenses ASB Annual Meeting Expenses Registration Meeting A2Z Convention Services EC Interim Meeting	\$(600) \$(23,500) \$(94,847) \$(14,400) \$(2,000)	\$(134,747)	\$(135,347)
V.	ENDING BALANCE			\$56,555
VI.	NET INCREASE			\$28,385
	ASB ENRICH 1 JANUARY – 31 I			¢20.470
I.	BEGINNING BALANCE			\$28,170
II.	RECEIPTS 1. Contributions (Amount received from the Claudia TOTAL RECEIPTS	Jolls Challen	\$3,925 ge \$3,550)	\$3,925
III.	TOTAL RECEIPTS AND BEGINNI	NG BALANC	E	\$32,095
IV.	TOTAL DISBURSEMENTS			\$
V.	ENDING BALANCE			\$32,095
VI.	. NET DECREASE			

# ASSOCIATION OF SOUTHEASTERN BIOLOGISTS EXECUTIVE COMMITTEE MEETING WEDNESDAY 4 APRIL 2012 ATHENS. GA

#### **COMMITTEE REPORT**

#### **MEMBERSHIP OFFICER'S REPORT**

Don Roush, Scott Jewell, Tim Atkinson and Terry Richardson (ASB Membership Officer) have discussed the use of the new registration software, CVENT, for membership surveys. We may try this for registration at the 2013 meeting.

We are deeply grateful to the ASB Meeting Coordinator, Scott Jewell, for initiating and leading the development of this new asset.

#### **Deceased Members**

Henry (Hal) R. DeSelm Steve Dial Jim Fralish Joe Ann Lever Don Windler

#### **Request for Emeritus Status**

David Auth
Katharine B. Gregg
Ken Marion
Rebecca R. Sharitz
Joe Winstead

#### **Membership Numbers**

	Apr 05	Mar 06	Mar 07	Apr 08	Mar 09	Mar10	Apr 11	Apr 12
Complimentary	20	20	27	10	10	8	?	?
Contributing	11	11	8	8	6	3	?	1
Emeritus	65	73	74	65	65	62	46	43
Exhibitor	?	?	35	48	58	**36	77	81
Family	33	32	36	27	22	??(22)		
Library	56	56	52	49	49	*45	42	0
Life	11	25	38	45	56	67	76	83
Patron	7	7	7	7	9	5	4	3
Life & Patron	2	2	2	2	2	3	3	5
Regular	787	892	821	711	672	*669	419	440
Student	308	517	559	403	303	337	190	280
Sustaining	4	2	2	2	0	0	?	?
TOTAL	1302	1635	1659	1375	1252	1257	857	936

Respectfully submitted,

Terry Richardson, ASB Membership Officer

# ASB Southeastern Biology Staff, ASB Officers, and Executive Committee Members-at-Large, 2012-2013

Telephone numbers, Fax numbers and e-mail addresses can be found on the inside front cover of each issue of the *Southeastern Biology*.

Southeastern Biology Staff

Journal Editor James D. Caponetti, Division of Biology, University of

Tennessee, Knoxville, TN

Associate Editor Conley K. McMullen, Department of Biology, James

Madison University, Harrisonburg, VA

Web Editor Ashley B. Morris, Department of Biology, Middle

Tennessee State University, Murfreesboro, TN

Business Manager Tim Atkinson, Carolina Biological Supply Company,

Burlington, NC

News Editor Ricky Fiorillo, School of Science and Technology,

Georgia Gwinnett College, Lawrenceville, GA

Book Review Editor Melissa Pilgrim, Department of Biology, University of

South Carolina Upstate, Spartanburg, SC

Book Review Christopher G. Brown, Dept. of Biology, Shorter College,

Associate Editors Rome, GA. \*Jennifer Mandel, Dept. of Plant Biology,

University of Georgia, Athens, GA

Meetings Coord. Scott Jewell, P. O. Box 1088, Mebane, NC

**ASB Officers** 

President Donald H. Roush, Department of Biology, University of

North Alabama, Florence, AL

President-Elect Zack Murrell, Department of Biology, Appalachian State

University, Boone, NC

Vice President Rebecca Ann Cook, Department of Biology, University of

Memphis-Lambuth, Jackson, TN

Past President Patricia B. Cox, Tennessee Valley Authority, 400 West

Summit Hill Drive, Knoxville, TN

Secretary Conley K. McMullen, Department of Biology, James

Madison University, Harrisonburg, VA

Treasurer Tim Atkinson, Carolina Biological Supply Company,

Burlington, NC

Membership Officer Terry D. Richardson, Department of Biology, University

of North Alabama, Florence, AL

Database Manager Deborah Atkinson, School of Public Health, University of

North Carolina, Chapel Hill, NC

Archivist John Herr, Department of Biological Sciences, University

of South Carolina, Columbia, SC

**Executive Committee Members-at-Large** 

2013: James T. Costa, Department Biology, Western Carolina University, Cullowhee, NC. \*Ashley B. Morris, Department Biology, University of South Alabama, Mobile, AL.

2014: Irene Kokkala, Center for Teaching and Learning, North Georgia College & State University, Dahlonega, GA. \*Roland Roberts, Department of Biological Sciences, Towson University, Towson, MD.

2015: Judy Awong-Taylor, School of Sciences and Technology, Georgia Gwinnette College, Lawrenceville, GA \*William Ensign, Department of Biology and Physics, Kennesaw State University, Kennesaw, GA

Association Affairs 519

#### ASB COMMITTEES 2012-2013

#### Representatives to Other Societies

#### AAAS - American Association for the Advancement of Science

Representative: Tim Atkinson, Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215; 336-538-6224; Fax 336-538-6322; tim.atkinson@carolina.com

#### AIBS - American Institute of Biological Sciences

Representative: Stephanie Songer, Department of Biology, North Georgia College and State University, Dahlonega, GA 30597; 706-864-1959; or 706-429-5379; Fax 706-867-2703; <a href="mailto:srsonger@ngcsu.edu">srsonger@ngcsu.edu</a>

#### NSCA - Natural Science Collections Alliance

Representative: Alexander Krings, Department of Plant Biology, NC State University, Box 7612, Raleigh, NC 27695-7612; 919-515-2700; Fax 919-515-3436; alexander krings@ncsu.edu

#### **ASB Committees**

#### **Committee for Human Diversity**

Chair: Marilynn Pendley, 1897 Fairway Drive, Newton, NC 28658; 828-612-4573; <a href="mailto:mpendley@cccti.edu">mpendley@cccti.edu</a>

Tina Hubler, Department of Biology, University of North Alabama, Florence, AL 35632; 256-765-4761; trhubler@una.edu

Valarie Burnett, Department of Science and Mathematics, Newberry College; Newberry, SC 29108; 803-321-5614; <a href="mailto:valarie.burnett@newberry.edu">valarie.burnett@newberry.edu</a>

#### **Conservation Committee**

Chair: Smoot Major, Department of Biology, University of South Alabama, Mobile, AL; 3688; 251-460-6276; smajor@usouthal.edu

**Jeff Ray**, Department of Biology, University of North Alabama, Florence, AL, 35632; 256-765-4933; jmray1@una.edu

Kunsiri Chaw Grubbs, Department of Biology, Winthrop University; Rock Hill, SC 29733; 803-323.2111, x 6437; grubbsk@winthrop.edu

#### **Education Committee**

- Chair: Kirk Stowe, Department of Biology, University of South Carolina, Columbia, SC 29208; 803-77-3379; kstowe@biol.sc.edu
- Chris Havran, Department of Biology, Campbell University, Blue Creek, NC 27506; 910-893-1730; havran@campbell.edu
- Holly L. Boettger-Tong, Division of Natural Sciences and Mathematics, Wesleyan College, Macon, GA 31210; 478-757-5276; <a href="https://hobettgertong@wesleyancollege.edu">hboettgertong@wesleyancollege.edu</a>
- Stephen C. Richter, Department of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475; 859-622-8688; stephen.richter@eku.edu
- John Aliff, Math/Science Department, Georgia Perimeter College; Lawrenceville, GA 30043; 678-438-2901; jaliff@gpc.edu
- Erika Scocco, Department of Biology, Wingate University; Wingate, NC 28174: 704-233-8323; E.scocco@wingate.edu

#### Enrichment Fund Board

Chair: W. Michael Dennis, Breedlove, Dennis and Associates, Inc., 330 W. Canton Avenue, Winter Park, FL 32789; 407-677-1882; Fax 407-657-7008; Toll Free 800-304-1882; mike@bda-inc.com

#### **Finance Committee**

- Chair: Tim Atkinson, Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215; 336-538-6224; Fax 336-538-6322; tim.atkinson@carolina.com
- EFB Chair: W. Michael Dennis, Breedlove, Dennis and Associates, Inc., 330 W. Canton Avenue, Winter Park, FL 32789; 407-677-1882; Fax 407-657-7008; Toll Free 800-304-1882; mike@bdainc.com
- Vice President: Rebecca Cook, Department of Biology, University of Memphis Lambuth Campus, Jackson, TN 38301; 731-425-1920; racook@memphis.edu
- Executive Committee Member: Irene Kokkala, Department of Biology, North Georgia College & State University, Dahlonega, GA 30597; 706-864-1862; ikokkala@ngcsu.edu

#### Graduate Student Support Award Committee – Awards Sponsored by ASB

- Chair: Michael Gangloff, Department of Biology, Appalachian State University, Boone, NC 28608; 828-262-7790; gangloffmm@appstate.edu
- Lisa Kelly, Department of Biology, PO Box 1510, University of North Carolina Pembroke, Pembroke, NC 28372; 910-521-6377; lisa.kelly@uncp.edu
- **Jennifer Borgo**, Department of Mathematics and Sciences, Coker College; Hartsville, SC 29550; 843-383-8396; jborgo@coker.edu

Association Affairs 521

#### **Membership Benefits Committee**

Chair: Sarah Noble, Department of Natural Sciences, University of Mobile, 5735 College Parkway, Mobile, AL 36613; 251-295-4267; waterfallbotanist@hotmail.com

- Scott Jewell, A2ZConvention Services, PO Box 1088, Mebane, NC 27302; 336-421-0034; Cell 336-213-7373; Toll Free Fax 866-213-2095; a2zconvention@yahoo.com
- David Whetstone, Biology Department, Jacksonville State University, 700 Pelham Road, Jacksonville, AL 36265; 256-782-5215; Fax 256-782-5587; whetstone@cableone.net
- Donald Roush, Department of Biology, University of North Alabama, Florence, AL 35632; 256-765-4435; Fax 256-765-4430; dhroush@una.edu

# Meritorious Teaching Award Committee – Award Sponsored by ASB Patron Member Carolina Biological Supply Company

- Chair: Dwayne Wise, Department of Biological Sciences, Mississippi State University, Mississippi State, MS 39762; 662-325-7579; daw1@ra.msstate.edu
- R. Wayne Van Devender, Department of Biology, Appalachian State University, Boone, NC 28608; 828-262-6907; <u>vandevenderr@</u> appstate.edu
- Jennifer Davis, Department of Biology and Physics, Kennesaw State University; Kennesaw, GA 30144; jdavis@kennesaw.edu

#### **Nominating Committee**

- Chair: Patricia Cox, TVA Heritage Program, 400 West Summit Hill Drive, WT11C, Knoxville, TN 37902; 865-632-3609; Fax 865-632-4223; pbcox@tva.gov
- W. Michael Dennis, Breedlove, Dennis and Associates, Inc., 330 W. Canton Avenue, Winter Park, FL 32789; 407-677-1882; Fax 407-657-7008; Toll Free 800-304-1882; mike@bda-inc.com
- Patricia Parr, ORNL, PO Box 2008 MS6340, Oak Ridge, TN 37831-6340; 865-576-8123; Fax 865-241-5814; parrpd@ornl.gov

#### Past-President's Council

Chair: Patricia Cox, TVA Heritage Program, 400 West Summit Hill Drive, WT11C, Knoxville, TN 37902; 865-632-3609; Fax 865-632-4223; pbcox@tva.gov

#### **Annual Meeting Arrangement Committee**

Chair: Scott Jewell, A2ZConvention Services, PO Box 1088, Mebane, NC 27302; 336-421-0034; Cell 336-213-7373; Toll Free Fax 866-213-2095; a2zconvention@yahoo.com

- **Tom Pauley**, Department of Biology, Marshall University, Huntington, WV 25755; 304-696-2376; pauley@marshall.edu
- Dan Evans, Department of Biology, Marshall University, Huntington, WV 25775; 304-696-3148; evans@marshall.edu
- Randall Small, Department of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN 37996-1610; 865-974-2371; rsmall@utk.edu
  One-Year Term
- William Ensign, Department of Biology and Physics Kennesaw State University, Kennesaw, GA 30144; 770-499-3505; Fax 770-423-6625; bensign@kennesaw.edu Two-year term
- Judy Awong-Taylor, School of Sciences & Technology, Georgia Gwinnet College, Lawrenceville, GA 30043; 678-407-5706; jawongta@ggc.edu Three-year term

# Poster Awards Committee – Award Sponsored by ASB Patron Member Brooks/Cole Cengage Learning

- Chair: Megan Gibbons, Department of Biology, Birmingham Southern College, Birmingham, AL 35254-9022; 205-226-7817; <a href="mgibbons@bsc.edu">mgibbons@bsc.edu</a>
- Jennifer Boyd, Department of Biological and Environmental Sciences, University of Tennessee, Chattanooga, Chattanooga, TN 37403-2598; 423-425-4341; Jennifer-Boyd@utc.edu
- Sharryse Henderson, Department of Biology, Georgia Highlands College, Cartersville Campus, 5441 Highway 20, NE, Cartersville, GA 30121; 678-872-8112; Fax 678-872-8098; <a href="mailto:shenders@">shenders@</a> highlands.edu
- Sarah Noble, Department of Natural Sciences, University of Mobile, 5735 College Parkway, Mobile, AL 36613; ; 251-295-4267; waterfallbotanist@hotmail.com
- William Ensign, Department of Biology and Physics Kennesaw State University, Kennesaw, GA 30144; 770-499-3505; Fax 770-423-6625; bensign@kennesaw.edu
- **Rob Hopkins**, School of Sciences, University Rio Grande, Rio Grande, OH 45674; 740-245-7252; <a href="mailto:rhopkins@rio.edu">rhopkins@rio.edu</a>
- **Jennifer Borgo**, Department of Mathematics and Sciences, Coker College; Hartsville, SC 29550; 843-383-8396; jborgo@coker.edu

#### **Publications Committee**

- Chair: Roland Roberts, Biological Sciences, Towson University, 8000 York Road, 341 Smith Hall, Towson, MD 21252-0001; 410-704-3034; rroberts@towson.edu
- James Costa, Department of Biology and Director Highland Biological Center, Western Carolina University, Cullowhee, NC 28723; 828-227-3811 or 828-526-2602; costa@email.wcu.edu

Association Affairs 523

**Terry Richardson**, Department of Biology, University of north Alabama, Florence, AL 35632; 256-765-4429; Cell 256-443-9165; Fax 256-765-4430; tdrichardson@una.edu

- Ex-Officio Print Editor: Jim Caponetti, Division of Biology, M303
  Walters Life Sciences Building, University of Tennessee, Knoxville,
  TN 37996-0830; 865-974-6841; Fax 865-974-4057; jcaponet@utk.edu
- Ex-Officio Web Editor: Ashley Morris, Department of Biology, Middle Tennessee State University, Murfreesboro, TN 37132; 615-494-7621; Fax 615-898-5093; amorris@mtsu.edu

# Research Awards Committee – Senior - Award Sponsored by ASB Patron Member Marilyn Pendley

- Chair: John Carr, Department of Biology, University of Louisiana Monroe, Monroe, LA 71209; 318-342-1796; carr@ulm.edu
- Tom Pauley, Department of Biology, Marshall University, Huntington, WV 25755; 304-696-2376; pauley@marshall.edu
- Michael Dorcas, Department of Biology, Davidson College, Davidson, NC 28035-7118; 704-894-2727; mdorcas@davidson.edu

#### Research Awards Committee – Student – Award Sponsored by ASB Patron Members Martin Microscope Company and Brooks/Cole Cengage Learning

- Chair: Mac Alford, Department of Biological Sciences, University of Southern Mississippi, 118 College Drive #5018, Hattiesburg, MS 39406; 601-266-6531; mac.alford@usm.edu
- Cathryn Greenberg, USDA-Forrest Service, Bent Creek Experimental Forrest, Asheville NC 28806; 828-667-5261 Ex 118; kgreenberg@fs.fed.us
- Chris Gissendanner, Department of Basic Pharmaceutical Sciences, University of Louisiana, Monroe, Monroe, LA 71209; 318-342-3314; gissendanner@ulm.edu

#### Research Awards Committee - Microbiology - Award Sponsored by ASB

- Chair: Michael Land, Northwestern State University, 211 Bienvenu Hall, Sam Sibley Drive, Natchitoches, LA 71497; 318-357-5323; land@nsula.edu
- Lisa Ann Blankinship, Department of Biology, University of North Alabama, Florence, AL 35632; 256-765-5044; Fax 256-765-4430; <a href="mailto:lblankinship@una.edu">lblankinship@una.edu</a>
- Chris Gissendanner, Department of Basic Pharmaceutical Sciences, University of Louisiana, Monroe, Monroe, LA 71209; 318-342-3314; <a href="mailto:gissendanner@ulm.edu">gissendanner@ulm.edu</a>

#### **Resolution Committee**

- Chair: Patricia Cox, TVA Heritage Program, 400 West Summit Hill Drive, WT11C, Knoxville, TN 37902; 865-632-3609; Fax 865-632-4223; pbcox@tva.gov
- Kim Marie Tolson, Department of Biology, University of Louisiana Monroe, Monroe, LA 71209; 318-342-1805; tolson@ulm.edu
- Bonnie Kelley, Department of Biology, PO Box 1510, University of North Carolina Pembroke, Pembroke, NC 28372; 910-521-6419; bonnie.kelley@uncp.edu

#### **Program Committee**

- Howard Neufeld, Department of Biology, Appalachian State University, Boone, NC 28608; 828-262-2683; neufeldhs@appstate.edu
- Riccardo Fiorillo, School of Science & Technology, Georgia Gwinnett College; Lawrenceville, GA 30043; 678-464-9918; rfiorill@ggc.edu
- Christopher Brown, School of Science & Technology, Georgia Gwinnett College; Lawrenceville, GA 30043; 678-407-5000; <a href="mailto:cbrown37@ggc.edu">cbrown37@ggc.edu</a>

#### Meetings Coordinator

Scott Jewell, A2ZConvention Services, PO Box 1088, Mebane, NC 27302; 336-421-0034; Cell 336-213-7373; Toll Free Fax 866-213-2095; a2zconvention@yahoo.com

#### **Committee on Bioinformatics**

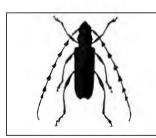
- Zack Murrell, Department of Biology, Appalachian State University, Boone, NC 28608: 828-262-2674: murrellze@appstate.edu
- W. Michael Dennis, Breedlove, Dennis and Associates, Inc., 330 W. Canton Avenue, Winter Park, FL 32789; 407-677-1882; Fax 407-657-7008; Toll Free 800-304-1882; mike@bda-inc.com
- Hank Bart, Department of Ecology and Evolutionary Biology, Boggs 400, Tulane University, New Orleans, LA 70118; 504-862-8283; hank@museum.tulane.edu
- Susan Farmer, School of Science and Mathematics, Abraham Baldwin Agricultural College, Tifton, GA 31793; 229-391-5126; <a href="mailto:sfarmer@abac.edu">sfarmer@abac.edu</a>

Advertisement 525

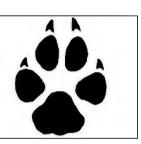
# the compleat naturalist



nature-inspired gifts for all ages
 books and equipment for outdoor learning







# The Compleat Naturalist

Historic Biltmore Village 2 Brook Street Asheville NC 28803 828-274-5430 / 800-678-5430 www.compleatnaturalist.com

#### CALL FOR PAPERS

### THE 74<sup>th</sup> ANNUAL MEETING OF THE ASSOCIATION OF SOUTHEASTERN BIOLOGISTS

Hosted by: Marshall University, Huntington, WV

# ABSTRACTS WILL BE ACCEPTED FROM MONDAY, 5 NOVEMBER 2012 UNTIL FRIDAY, 1 FEBRUARY 2013

#### **Abstract Submission**

Abstracts should be submitted two ways: online via the link on the ASB website (http://www.sebiologists.org/) AND as an attachment to an email sent to the program chair. The email attachment ensures we get the proper formatting, authorships, and addresses, in case there are problems with the online submission process. Late abstracts will not be published in the program. Presenters will be notified of the day and time of their presentation in mid-March and will be scheduled according to topic preferences and date of abstract submission. Please do not request specific presentation times except in cases of hardship or to avoid conflicts with specific papers. If you must have a specific time or day for your presentation, please indicate so in an email to the program chair.

Your abstract must be 250 words or less. We recommend that you first create your abstract using a word processor or plain text editor and paste a copy into the appropriate field on the electronic submission form. *Abstracts attached to the email should be properly formatted using WORD or WORDPERFECT*. Specific formatting instructions will be included on the abstract submission website. Authors not following formatting instructions will be asked to correct their abstracts before they are considered accepted.

You may nominate your research for one or more appropriate awards sponsored by our Association and our affiliate associations. *PLEASE READ THE INSTRUCTIONS AND DESCRIPTIONS OF EACH AWARD CAREFULLY.* Individuals not meeting an award's qualifications or not following an award's nomination process will be disqualified at the discretion of each awards committee.

#### **Preliminary Presentation Instructions**

**Oral presentations** are allotted 15 minutes and must be in PowerPoint format on a USB memory drive. **Posters** should fit into a 46" x 46" space and will be displayed for an entire day (Thursday or Friday). Presenters should be prepared to stand with their posters for a designated one hour period.

If you have any questions please contact the Program Chair, Howard Neufeld, neufeldhs@appstate.edu.

		Silent A	uction			
	Yes I would I with student to (100% of all p	ravel to the A	nnual Me	eeting.		elp
Partial Birming	List of Items nam	Donated at	the 20	09 Annual	Meeting	in
C A E C G E N	Dissection Set Corporate Gift ( Inatomical Mod Dinner for Two Wo Nights Hot Books Charts Cift Basket Educational Ch Dicroscope Golf Putting Ma	del el Accommod arts achine				
Descrip	tion of Item(s)	to be donated	d 			_
						_ _ _
						<u> </u>
F	check appropri lease contact will mail the do coordinator be	me at the col onation to Sc	ott Jewel			
Signature		D	ate	phone		
Title			e-ma	ail		

Return form by **March 15, 2013** to: Scott Jewell, ASB Meeting Coordinator, PO Box 1088, Mebane, NC 27302; A2Zconvention@gmail.com, 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax.

# Workshop Form

2013 Association of Southeastern Biologists April 10-13, 2013, Charleston, West Virginia

Workshop Description: All commercial workshops will be conducted during the meeting on a first-come first-served basis. Classroom style seating will be provided at no additional charge to the presenter. Each classroom will be set for a minimum of 50 participants. A screen will be provided for each room. LCD projectors and laptops will not be provided. One workshop per application please.

Signature Date	
Upon acceptance by ASB, this signed application and Workshop Contract form become for the 2012 ASB Annual Convention. Workshop presenter will be notified of the letter no later than 15 Dec 2011.	
Hold Harmless Clause The workshop presenter assumes all responsibility and liability for losses, dam arising out of injury to the presenter's display, equipment and other property to premises of the convention facilities and shall indemnify and hold harmless the asservants and employees as well as the ASB organization from any losses, damages	brought upon the ssociation agents,
Deadline for workshop submission is 15 October	r 2012
Thurs., 8:30am-10am Thurs., 10:30am-12noon Thurs., 1:30pm- Thurs., 3:30pm-5pm Fri., 8:30am-10am	3pm
Pre-Conference Workshop: Wed., 4pm-5:30pm	
Please indicate which time slot you prefer below:	
(Description will appear in Final Program of Southeastern Biology)	1
50-Word Workshop Description:	
Workshop Title:	
Web site:	
Telephone: Fax:	
Contact Address:	
Presenter Email Address:	
(Please list company name as you wish it to appear on printed materials)	
Company/Organization	

Return form by October 15, 2012 to: Scott Jewell, ASB Meeting Coordinator, PO Box 1088, Mebane, NC 27302; A2Zconvention@gmail.com, 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax.

# **Industry Partners Form**

2013 Association of Southeastern Biologists April 10-13, 2013, Charleston, West Virginia

Yes | Would Like To Partner With ASB And Participate
In the Industry Partners Program!!
Send no money now, please complete form and return to address shown below

Company/Organ	ization			
D	(Please list company name as you wish it to appear on printed materials)			
A alalan a a .	Email	-		
Telephone:	Fax:			
	ition at the Thursday Night Social, Friday Nigh n Center and a listing in Final Program of <i>Sou</i>			
Qty	Item	Amount		
	Wed. Night Cash Bar (4 Opportunities)	\$500/opportunity		
	Coffee Breaks (8 Opportunities)	\$500/opportunity		
	Cyber Café & Marketing Survey	\$750/opportunity		
	Thurs. Night Social (4 Opportunities)	\$900/opportunity \$850 See Workshop Form		
	Friday Night Banquet Cash Bar			
	Yes, I wish to present a workshop			
	24-Hour Exhibit Hall Security	\$1,000		
	ASB Executive Committee Breakfast	\$350		
	Yes, I would like to Donate an Item to the	See Silent Auction Form		
	Silent Auction to help with Student Travel			
	ASB Web Site Hot Link to			
	Your Company (12 months)	\$375		
	Yes, I would like an AD in all 4	See Advertising Form		
	2010 issues of Southeastern Biology (circle	choice)		
	1/4 page=\$200, 1/2 page=\$325, full page=\$42	5		
	AD in Final On-Site Program (circle choice)	See Advertising Form		
	1/4 page=\$175, 1/2 page=\$225, full page=\$27	5		
Signature		Date		
Title		e-mail		

Return Form with Check or Credit Card Information by **January 1, 2013** to: Scott Jewell, ASB Meeting Coordinator, PO Box 1088, Mebane, NC 27302; A2Zconvention@gmail.com, 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax.



# Advertising with the

# **Association of Southeastern Biologists**

Reach Your Target Audience and Promote your Products and Services Throughout the Year!! Advertise in *Southeastern Biology*.

Advertise in Southeastern Biology and reach over 1,500 members from 42 states

an On-Site Program for the A	shes 4 issues of <i>Southeastern Biology</i> per year and annual Meeting. Choose one or both opportunities to exposure. Promote your products and services
½ Page 1½" X 1"	
	½ Page 3" X 2"

Full Page 7½" X 4 ¾"

# Advertising with the Association of Southeastern Biologists (cont.)

Yes I would like an AD in all 4 (Full Color) issues of <i>Southeastern Biology</i> , (circle choice)
1/4 page=\$200, 1/2 page=\$325, full page=\$425
AD in Final On Site Program (circle choice) (Black & White Only)
1/4 page=\$175, 1/2 page=\$225, full page=\$275
*All must be submitted in jpg.

Return Form with Check or Credit Card Information to: Scott Jewell, ASB Meeting Planner, PO Box 1088, Mebane, NC 27302; <a href="mailto:AZZconvention@gmail.com">AZZconvention@gmail.com</a>, 336/213-7373 cell, 336/421-0034 office, 336/421-3425 fax.

# BEQUESTS TO THE ASSOCIATION OF SOUTHEASTERN BIOLOGISTS

If you would like to help assure ASB's future through a provision in your will, this general form of bequest is suggested:

I give, devise and begu	leath to the Association of Southeastern
Biologists, business office	ce located in Burlington NC, the sum of
\$	and/or (specifically described property).
If property, please descril	pe.

Donations to ASB, a not-for-profit corporation exempt under Internal Revenue Code Section 501(c)(3), are tax-deductible. We welcome any inquiries you may have. In cases in which you have specific wishes about the disposition of your bequest, we suggest you discuss such provisions with your attorney.

### SPECIAL REMINDERS FROM THE JOURNAL EDITOR

#### ASB BANQUET ATTENDANCE

Please keep in mind that recipients of ASB awards must be present at the annual ASB banquet to receive the award. Therefore, all applicants for ASB awards must attend the banquet to insure the presence of the winners.

#### MEMBERSHIP AND REGISTRATION UPDATE

All applicants for ASB research awards must be ASB members in good standing, and be duly registered for the annual meeting. If necessary, check with the Treasurer for verification before you apply.

Please make sure your membership status is up-to-date amply before the deadline for abstract submission and for annual meeting registration. Please be aware that mailing a check or money order for membership renewal to the treasurer and then trying to register online or by mail for the annual meeting on the same day does not work. Moreover, trying to pay for membership renewal online in tandem with registering for the annual meeting online does not work well either.

#### EXTRA ABSTRACT SUBMISSION

Besides sending abstracts of papers and posters to the Program Committee by February 1, 2013, anyone wishing to be considered for an award must send an abstract to the respective award committee chairperson in order to be considered. An abstract must be sent to the chairperson by February 1, 2013.

#### **Preliminary Presentation Instructions**

**Oral presentations** are allotted 15 minutes and must be in PowerPoint format on a USB memory drive. **Posters** should fit in a 46" x 46" space and will be displayed for an entire day (Thursday or Friday). Presenters should be prepared to stand with their posters for a designated one-hour period.

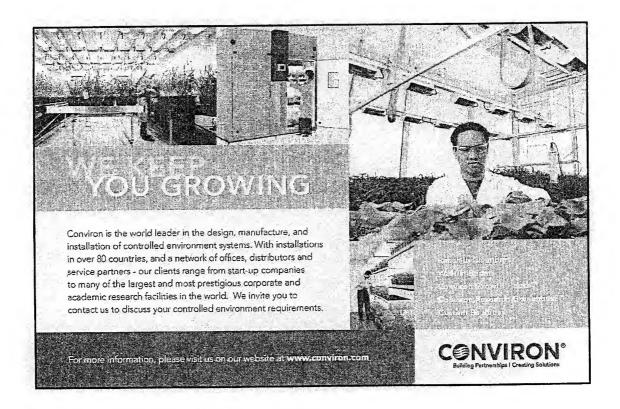
If you have any questions, please contact Program Chair, Howard Neufeld, <a href="mailto:neufeldhs@appstate.edu">neufeldhs@appstate.edu</a>.

# Nomination for ASB Officers and Executive Committee Positions

**DEADLINE: 15 OCTOBER 2012** 

To members of the Nominating Committee: I wish to suggest that you consider the following ASB member(s) in selecting nominees for officers and executive committee positions. ( <i>Please include the institutional address of each nominee</i> .)
VICE PRESIDENT
SECRETARY
SECRETART
EXECUTIVE COMMITTEE (two will be elected for three-year terms)
MAIL TO: Dr. Patricia Cox, TVA Heritage Program, 400 West Summit Hill Drive, WT11C, Knoxville, TN 37902; 865-632-3609; Cell 865-661-1241; fax 865-632-4223; pbcox@tva.gov.
NAME & ADDRESS OF NOMINATOR

Advertisement 535



## SUPPORT AWARDS FOR GRADUATE STUDENT MEMBERS OF ASB

#### **DEADLINE FOR POSTMARK: 1 FEBRUARY 2013**

Limited funds are available to partially defray the expenses of graduate students attending the Annual Meeting. The awards are for lodging and meals only, including the ASB Banquet. Departments are urged to provide transportation for their graduate students. Recipients must be members of ASB. See ASB web site for membership application or renewal forms. The guidelines for application are as follows:

- (a) The recipient is a current member of ASB.
- (b) The recipient must be presenting a paper or poster at the Annual Meeting and must include a separate copy of the abstract of the paper or poster to be presented along with the application.
- (c) The recipient must be currently enrolled as a graduate student in the department where he/she conducted this research.
- (d) Student travel awards are granted on a competitive basis. Applicants must document expected expenses and list other sources of financial support for this meeting, including institutional aid, shared lodging and shared transportation.
- (e) In a paragraph, give a brief history of your education to date: indicate how many years you have been in graduate school and the expected date of completion of work for your degree, your major field of study and research, publications, including those in press and in preparation, degree sought, name of major professor and any other pertinent details.
- (f) Give your source(s) of support while in graduate school: e.g. NSF, NIH, USDA, Teaching Asst., Research Asst., etc.
- (g) Include a letter of recommendation for an ASB support award from your faculty research advisor. This letter should comment on the work being presented and indicate the financial need of the student presenter. It should also indicate whether any departmental or other funding is available to the student.
- (h) Send application with supporting letter to: Dr. Michael Gangloff, Department of Biology, Appalachian State University, Boone, NC 28608; 828-262-7790. In addition, e-mail a copy of your completed application documents without the supporting letter to <a href="mailto:gangloffmm@appstate.edu">gangloffmm@appstate.edu</a>.
- (i) Applicants will be notified of the decision of the Committee as soon as is practical. Recipients of the award will pick up their checks at the ASB table at the meeting.

#### **GUIDELINES FOR POSTER PRESENTATIONS**

Poster sessions have been incorporated as a regular means of scientific presentation at the annual ASB meetings. This type of presentation provides a more informal environment that encourages a direct interchange of ideas and discussion between presenter and audience. Poster presentations are open to all ASB members. Adherence to the following guidelines helps ensure the effectiveness of the poster presentation and consideration for the award.

- (1) Display should fit on a 46" h x 46" w board suitable for thumbtacks, pushpins, or Velcro.
- (2) Poster must be displayed from 10 a.m. Thursday through 5 p.m. Friday. Authors will be required to be present at specified times during the Annual Meeting.
- (3) Poster should be carefully planned to maximize clarity and simplicity in conveying information.
- (4) Poster should have a heading, including a title, author, and author's institution(s). This heading should be placed at the top in letters no less than **3 cm** high.
- (5) The body of the poster, including text, figure legends, and table captions, should be in type no smaller than **18 pt (3-4 mm)** and *must* be legible from a distance of about 1-2 meters.
- (6) The body should be self-explanatory and should include figures, tables, graphs, maps, or photographs displayed in a well organized, coherent, and easy-to-follow sequence from top to bottom. Each illustration should contain a caption. Do not overcrowd the display. Significance will be one of the criteria looked for in judging the posters.
- (7) A limited degree of text may be included, but care should be taken not to overwhelm the audience.
- (8) A large, abbreviated version of the abstract should be presented at the top of the poster, but below the heading. A clear listing of specific conclusions should appear at the bottom or end of the presentation. An abstract must also be submitted to the award committee chair.

Further inquiries may be directed to the **Chair of the ASB Poster Award Committee**: Dr. Megan Gibbons, Department of Biology, Birmingham Southern College, Birmingham, AL 35254-9022; 205-226-7817; mgibbons@bsc.edu.

#### **RESEARCH AWARDS**

**SPECIAL NOTICE:** Please read carefully the description of requirements for the ASB award for which you apply. All applicants for ASB awards must be ASB members in good standing, and must be duly registered for the annual meeting. If necessary, check with the Treasurer for verification before you apply. Note especially that recipients of ASB awards must be present at the annual ASB banquet to receive the award.

#### ASB SENIOR RESEARCH AWARD (\$1000)

Given for an especially meritorious manuscript presented orally by the senior author at the annual meeting of ASB (or co-author under exceptional circumstances if the senior author cannot attend). The award applicant must be senior author on both the manuscript and oral presentation, and the presenter must be a member of ASB. In order to qualify for this award, sponsored by ASB Patron Member Marilyn Pendley, the senior author (or a representative) must have presented work orally at any previous annual meeting or have submitted an abstract by the 1 February abstract deadline for an oral presentation at the next annual meeting. The manuscript must either have been submitted for publication or be ready for submission and carry the format of the journal to which it will be (or has been) submitted. Author(s) may submit their papers electronically by emailing them to the committee chair (pdf preferred). Include a short (1 page maximum) biography of the award applicant. If sent by hardcopy, submit three copies of the manuscript and biographical sketch. Manuscripts received by 1 February 2013 will compete for the 2013 Senior Research Award, Manuscripts received after the deadline will be returned to the senior author who can then resubmit the following year. However, such manuscripts cannot have been published prior to the last annual meeting. Judges will use a standard evaluation form that includes the following criteria: significance of ideas, soundness of hypotheses, originality (creativity), quality of methodology, validity of results, soundness of conclusions, clarity, completeness, organization, and contribution to the field. Review papers, if submitted, should contain new information, such as novel syntheses from existing data, or an original contribution that extends our knowledge of the field, rather than just a review of existing literature. At the discretion of the Senior Research Award Committee, the award may be withheld or it may be split in case of a tie. The recipient of the award must be present at the annual ASB banquet to receive the award.

**Committee Chair**: Dr. John Carr, Department of Biology, University of Louisiana, Monroe, LA 71209; 318-342-1796; carr@ulm.edu.

#### ASB STUDENT RESEARCH AWARD (\$1000)

Given for an especially meritorious manuscript presented orally by the author(s) at the annual meeting. To be eligible for the Student Research Award (sponsored by ASB **Patron Member Martin Microscope Company**), the recipient must be the senior author on the manuscript, and must be a graduate or undergraduate student at the time of presentation. To qualify for the award, the author(s) must submit an **abstract** to the current Student Research Award

Committee Chair (posted on the website), due the same date as abstract submission to the program committee for presentations or posters (specified in the official call for papers). Complete applications for the competition must be received by the Student Research Award Committee Chair by February 1<sup>st</sup> prior to the annual meeting. Complete applications include (1) Three copies of a journal-ready manuscript. Papers may be in press, or published after the previous ASB annual meeting, but not prior; (2) abstract in same format as submitted for the ASB call for papers, including author names, titles, and contact information; (3) biographical sketches of each author. These materials may also (in addition to hardcopy) be sent by email to the committee chair. Judges will evaluate the manuscripts based on significance of ideas, soundness of hypotheses, originality, methodology, validity of results, soundness conclusions, clarity, completeness, organization, and contribution to the field. At the discretion of the Student Research Award Committee, the award may be withheld or it may be split in the case of a tie. Only members of the ASB are eligible and the recipient of the award must be present at the Annual ASB Awards Banquet to receive the award.

Committee Chair: Dr. Mac Alford, Department of Biological Sciences, University of Southern Mississippi, 118 College Drive #5018, Hattiesburg, MS 39406; 601-266-6531; mac.alford@usm.edu.

## BROOKS/COLE CENGAGE LEARNING STUDENT RESEARCH AWARD IN AQUATIC BIOLOGY (\$200)

The purpose of this award, sponsored by ASB Patron Member Brooks/Cole Cengage Learning, is to encourage excellence in aquatic biology research by undergraduate and graduate students. It is intended that "aquatic biology" be broadly interpreted. For example, research projects on aquatic organisms, wetland biota, and water quality are eligible. To be eligible for the Student Research Award in Aquatic Biology, the recipient must be the senior author on the manuscript, and must be a graduate or undergraduate student at the time of presentation. The paper must be based on research designed and completed by the student, and must be presented orally by the student as senior author at the annual meeting. To qualify for the award, the author(s) must submit an abstract to the current Student Research Award Committee Chair (posted on the website), due the same date as abstract submission to the program committee for presentations or posters (specified in the official call for papers). Complete applications for the competition must be received by the Student Research Award Committee Chair by February 1<sup>st</sup> prior to the annual meeting. Complete applications include (1) Three copies of a journal-ready manuscript. Papers may be in press, or published after the previous ASB annual meeting, but not prior; (2) abstract in same format as submitted for the ASB call for papers, including author names, titles, and contact information; (3) biographical sketches of each author. These materials may also (in addition to hardcopy) be sent by email to the committee chair. Judges will evaluate the manuscripts based on significance of ideas, soundness of hypotheses, originality, methodology, validity of results, soundness of conclusions, clarity, completeness, organization, and contribution to the field. At the discretion of the Student Research Award Committee, the award may be withheld or it may be split in the case of a tie. Only members of the ASB are eligible and the recipient of the award must be present at the Annual ASB Awards Banquet to receive the award.

Committee Chair: Dr. Mac Alford, Department of Biological Sciences, University of Southern Mississippi, 118 College Drive #5018, Hattiesburg, MS 39406; 601-266-6531; mac.alford@usm.edu.

#### ASB RESEARCH AWARD IN MICROBIOLOGY (\$500)

Sponsored by ASB, the award is given for an especially meritorious oral presentation of research results by the author(s) at the annual meeting. The purpose of the award is to stimulate greater participation at the Annual Meeting in the broad area of microbiology, principally prokaryotic microbiology. The research may involve cell biology, physiology, molecular biology and/or genetics of these organisms, but must clearly be about the organisms and not the disciplines. The presentation must deal clearly with prokaryotic microbes and should represent substantially completed work. In order to qualify for this award, the senior author must request consideration for the award on the abstract submission form, submit one copy of the title and abstract to the ASB Program Chair by 1 February 2013, and submit a second copy by the same date to the Microbiology Award Committee Chair. Only members of ASB are eligible and the recipient of the award must be present at the Annual ASB Banquet to receive the award (go to http://asb.appstate.edu/member.htm for membership application or renewal form).

Committee Chair: Dr. Michael Land, Northwestern State University, 211 Bienvenu Hall, Sam Sibley Drive, Natchitoches, LA 71497; 318-357-5323; land@nsula.edu.

#### **ASB STUDENT POSTER AWARD (\$300)**

Given for an especially meritorious poster presentation by the author(s) at the Annual Meeting. The purpose of the award, sponsored by ASB Patron Member Brooks/Cole Cengage Learning, is to stimulate greater student participation at the Annual Meeting. To qualify for this award, the senior author must be a graduate or undergraduate student at the time of presentation, must be a member of ASB, must submit an abstract by the 1 February 2013 deadline, and must be present at the Annual ASB Awards Banquet. Student poster presentations must also adhere to the "Guidelines for Poster Presentations." Only student authors who request consideration for the poster award on the abstract submission form will be judged for the award. In addition to adherence to the "Guidelines for Poster Presentations," student poster presentations will also be judged using the following specific criteria:

- (1) Overall aesthetics and attractiveness of presentation
- (2) Ease of reading from a distance (1-2 meters)
- (3) Clear and concise organization
- (4) Clearly stated hypothesis or study objectives
- (5) Soundness of methods for testing hypotheses or meeting study objectives
- (6) How well conclusions are supported by results

At the discretion of the ASB Poster Award Committee, the award may be withheld or it may be split in the case of a tie. Some posters may also be awarded "Honorable Mention" at the discretion of the ASB Poster Award Committee (Honorable Mention awardees receive no monetary award). Further inquiries may be directed to the chair of the ASB Poster Award Committee.

**Committee Chair:** Dr. Megan Gibbons, Department of Biology, Birmingham Southern College, Birmingham, AL 35254-9022; 205-226-7817; <a href="mailto:mgibbons@bsc.edu">mgibbons@bsc.edu</a>.

#### EUGENE P. ODUM AWARD (\$500)

The Eugene P. Odum Award is sponsored by the Southeastern Chapter of ESA. This Award of \$500 is given for the best oral presentation on ecological research given by a student at the Association of Southeastern Biologists [ASB] Annual Meeting. Undergraduate and graduate students are eligible. The research presented should be primarily of the student's design and should represent a culmination of their work. Presentations describing preliminary work or data will not be considered for the Odum Award. Likewise, the abstract must be complete with results and discussion comprising a significant portion of the abstract. Students may not compete for the Award in successive years on the same project, and may not compete simultaneously for the Odum and Quarterman-Keever Awards in the same year.

(1) A student must indicate his or her interest by clicking the Odum Award radio button on the abstract submission website. To be considered, the student must submit the abstract by the deadline announced in the Call for Papers to <u>both</u> the (2) ASB Meeting Program Chair <u>and</u> directly to the (3) Chair of the Odum Award Committee, Dr. Kimberly J. Bolyard, Department of Biology, Bridgewater College, Bridgewater, VA 22812; 540-828-5427; fax 540-828-5661; <u>kbolyard@bridgewater.edu</u>. Send e-mail with the abstract attached. Enter ODUM AWARD (your last name) in the subject line. **Submissions failing to meet these three criteria will not be considered**.

Committee Chair: Dr. Kimberly J. Bolyard, Department of Biology, Bridgewater College, Bridgewater, VA 22812; 540-828-5427; fax 540-828-5661; <a href="kbolyard@bridgewater.edu">kbolyard@bridgewater.edu</a>.

#### ELSIE QUARTERMAN-CATHERINE KEEVER AWARD (\$300)

Given by the Southeastern Chapter of the Ecological Society of America for the best ecological poster presented by a student. This award was presented for the first time in 2005. Undergraduate and graduate students are eligible. The student must be the sole or senior author. The poster must deal with a clearly ecological topic and should represent substantially completed work. It should be presented in a regular contributed poster session. Students may not compete for this award in successive years with the same project. Students may not compete simultaneously for the Elsie Quarterman-Catherine Keever Award and the Odum Award in the same year. One copy of the title and abstract should be sent to the ASB Program Chair by the "Call for Papers" deadline of 1 February 2013 and a

second copy must be sent via email by the same date to the Quarterman-Keever Committee Chair.

Committee Chair: Dr. Janet MacFall, Center for Environmental Studies, Elon University, Elon, NC 27244; 336-278-6202; macfalli@elon.edu.

#### THE NORTH CAROLINA BOTANICAL GARDEN AWARD (\$200)

Given by NCBG (through the Southeastern Section of the Botanical Society of America and the Southern Appalachian Botanical Society). This is awarded for a paper presented at the annual ASB meetings that best advances our understanding of the biology and conservation of the southeastern plants and thus contributes to the mission of the North Carolina Botanical Garden. Of special interest to the Garden are the rare plant species of the Southeast: why they are rare; how they interact with plants, animals, and their environment; and what can be done to ensure their survival. The paper may deal with a broad area including systematics, ecology and conservation. All individuals who are eligible to present at the ASB meetings are eligible for this award. They may be students, faculty or others.

**Committee Chair:** Dr. John Randall, Department of Biology, University of North Carolina, Greensboro, NC 27412; 919-962-0522; fax 919-962-3531; jrandall@email.unc.edu.

## SOCIETY OF WETLAND SCIENTISTS SOUTH ATLANTIC CHAPTER STUDENT TRAVEL AWARD

The Association of Southeastern Biologists (ASB) Meeting Travel Award (http://www.asb.appstate.edu/) (http://www.sws.org/regional/southatlantic/ travelguidelines\_ASB.html). The SAC is offering two \$100 travel awards to help support students presenting wetlands research at the Association of Southern Biologists (ASB) annual meeting in Charleston, West Virginia, April 10-13, 2013. The Chapter's Awards and Executive Committees will judge the applicants based on the scientific quality and importance of their research as described in the abstract. All students presenting research on a wetland topic are eligible; membership in SWS is not required. Students: please submit your abstract as instructed in the ASB call for papers. Further, applicants must also submit their abstract by e-mail to the SWS-SAC Awards Chair, David Bailey, at David.E.Bailey2@usace.army.mil to be considered for a SWS-SAC travel award. Award winners will be invited to the Chapter's luncheon meeting (no charge for awardees) held during the ASB annual meeting. The deadline for this travel award is February 1, 2013. Dr. Bailey's address and telephone number - U.S. Army Corps of Engineers, CE-SAW-RG-L, 69 Darlington Ave., Wilmington, NC 28403-1343: 910-251-4469.

### BOTANICAL SOCIETY OF AMERICA SOUTHEASTERN SECTION STUDENT AWARDS

Two awards: A \$300 cash prize for the best paper and a \$300 cash prize for the best poster in plant science presented at the annual meeting of ASB. In

addition, each winner will receive funds towards travel to the annual BSA meeting as well as one year's membership in BSA. These are awards for papers and posters in botany in its broadest sense including fungi and algae as well as plants.

Who is eligible: Undergraduate and graduate students are eligible. The student must be the sole or senior author of the paper or poster.

How to apply: To be included in the competition, applicants should e-mail their abstract to the Botanical Society of America Southeastern Section Student Award committee chair by the abstract deadline of 1 February 2013. The winner will be announced at the ASB Banquet.

**Committee Chair:** Dr. Zack Murrell, Department of Biology, Appalachian State University, Boone, NC 28608; 828-262-2674; murrellze@appstate.edu.

## Southern Appalachian Botanical Society Outstanding Student Paper and Poster Awards

The society offers two awards for students: the SABS Outstanding Student Paper Award, and the SABS Outstanding Student Poster Award. A nominee must be a current undergraduate or graduate student in good standing, and must be a current member of SABS. A student will nominate his/her paper or poster presentation when registering for the annual ASB meeting and submitting the abstract. The instructions for nomination are on the ASB web site. Each award includes an honorarium of \$150.00, and the winners will be announced at the ASB Friday night banquet.

#### **Earl Core Student Award**

The Core Student Award was established by the Society Council to provide financial assistance in support of student research projects in plant taxonomy, systematics and ecology.

#### Criteria and Procedures

- An applicant for a Core Student Award and his/her research advisor must be members of the Southern Appalachian Botanical Society (SABS).
- Support in the form of a Core Student Award will be presented to an individual student for a given research project only once; applications for additional support for the same project will not be considered.
- 3. The research advisor will attest to the applicant's student status and validity of the research proposal.
- 4. The annual award period will run from May 1 of the award year through April 30 of the next year.
- 5. An individual award may not exceed \$300.
- 6. Award applications for consideration each year must be received by the committee chair no later than February 15 of the award year. Download the application cover sheet on SABS website (http://www.sabs.appstate.edu/Awards/CoreMain.htm) for submitting information. The chair will transmit copies of each application to other members of the committee and will

- subsequently report the decision of the committee to the Society president by April 1. Award recipients will be announced in April at the annual meeting of SABS/ASB in Asheville, North Carolina.
- 7. Awards will be designated on a competitive basis with the applications reviewed and awardee(s) selected by the Core Student Award Committee. Should a member of the committee be the research advisor of an applicant, he/she will be excused as a reviewer for that entire group of applications and replaced by the society president.
- 8. Recipients of a Core Student Award are expected to submit a summary for publication in *Chinquapin* (our newsletter). Though not required, recipients are encouraged to submit the results of their research to *Castanea* for possible publication. In any case, oral presentation(s) and/or publication(s) resulting from financial support will appropriately acknowledge SABS.

Submit completed applications to: **Dr. Jay Bolin**, Department of Biology, Catawba College, 2300 W. Innes Street, Salisbury, NC 28144; 704-637-4450; jfbolin@catawba.edu.

For the award requirements of other ASB affiliates, visit their respective web site:

American Society of Ichthyologists and Herpetologists—http://www.asih.org/ Southeastern Microscopy Society—http://www.semicroscopy.org Southern Society of Parasitologists—http://asp.unl.edu

#### SPECIAL AWARDS

#### THE ROBERT H. MARTIN PROFESSIONAL EXCELLENCE AWARD

Sponsored by Martin Microscope Company, this ASB award is established to honor the memory of Robert H. Martin, Sr., founder of Martin Microscope Company. ASB members are invited to nominate outstanding ASB scientists, educators, and professionals to receive the Robert H. Martin Professional Excellence Award, established in 2008 and sponsored by **Martin Microscope Company**. In keeping with the example of the award namesake, nominees must be ASB members who have devoted a major portion of their career to energetic, creative commitment and skillful, effective service to biology education, biology research, and/or the biology profession. This award is only presented when the award committee identifies an exceptional, qualified nominee. Recipients are honored at the Awards Banquet during the ASB Annual Meeting and will receive a plaque and a cash award. The amount of the cash award is to be determined by the Robert H. Martin Award Fund Committee. Nominations must include a detailed written description of the candidate's qualifications. Nominations may be submitted at any time.

Please send nominations to: **Tim Atkinson**, ASB Treasurer, 2700 York Rd., Burlington, NC 27215, tim.atkinson@carolina.com.

#### The John Herr Lifetime Achievement Award

This prestigious award was established by the Association of Southeastern Biologists in 2007 to recognize unusually significant contributions by its members to the life of the Association and to biology in the southeastern US. The award was first presented to its namesake, Distinguished Professor Emeritus John Herr (Department of Biological Sciences, University of South Carolina), by President Kim Marie Tolson in Columbia, South Carolina on April 20, 2007, on the occasion of the 68<sup>th</sup> Annual Meeting of the Association. This award is to be presented at an Annual Meeting of the Association to no more than one recipient, but there is no requirement that it be given every year.

A nominator wishing to submit a candidate for this award to the Association must prepare a nomination package on behalf of the candidate, following the quidelines below. The package is to be conveyed to the President of the Association by June 15 to be in competition for the award presented at the upcoming Annual Meeting. The President will appoint a committee consisting of three individuals, at least one of whom will be a Past President and the other two officers or former officers of the Association. That committee will consider all active packages and will report a nomination of a single award recipient (if any) to the President of the Association, who will present it to the interim Executive Committee (EC) meeting, held in September or October of each year. Upon a majority vote in favor of the nomination from the EC members present at such a meeting, the President will appoint an individual (typically the most recent Past President) to prepare a plaque and citation to be presented by the President to the recipient at the awards banquet during the upcoming Annual Meeting. Other nomination packages may be held over for consideration, for a maximum of two additional years, after which time unsuccessful packages will be returned to their nominators.

A recipient of this award must have contributed in ways that set her or him apart from other members of the Association. In particular, the recipient must have:

- Demonstrated unusual and long-standing devotion to the Association through consistent efforts to improve and advance ASB, going beyond the standard duties of committee members and officers. The recipient must have demonstrated a willingness to serve the organization when asked for additional service.
- 2. Been a member in good standing of the Association for a minimum of ten years.
- 3. Served as an elected or appointed officer of the Association.
- 4. Contributed in a significant way to the Association's purpose of promoting the advancement of biology as a science in the southeastern US, through research, education, solution of biological problems, conservation, public awareness of biological issues, and/or public service.
- Have other accomplishments indicative of unusual dedication and service to the Association.

There must be letters of nomination from at least three members of the Association endorsing the nominee, one of whom must be a Past President. Additional letters of support from other members are welcome, but not required. The letters of nomination must be as specific as possible concerning the five points outlined above. In addition, the letters of nomination must outline what the candidate has done that sets her or him apart from other members of the Association. The nomination package must also contain the candidate's curriculum vitae.

## Honor Thy Teacher! ASB MERITORIOUS TEACHING AWARD DEADLINE FEBRUARY 1, 2013

Each year the Association of Southeastern Biologists recognizes one of its members for especially meritorious teaching. Carolina Biological Supply Company, Burlington, North Carolina, generously sponsors this \$1500 award, which will be presented together with a plaque and appropriate citation at the Annual Banquet in Charleston, West Virginia, April 10-13, 2013. The Meritorious Teaching Award Committee each year selects the award winner

- from among those who have been members of the association for at least 10 years
- > and who have taught biology for at least ten years in any college or university represented in the association.

There is no restriction on the size of the institution, nor must the institution have a graduate program. The award simply recognizes highly effective teaching

as highlighted in nominations from former students or colleagues.

There are many deserving teachers in ASB; however, these individuals cannot nominate themselves, so former students or colleagues must take an active role in assembling the materials that the committee will then evaluate.

We urge you to take the lead, pass the word – serve as the coordinator and nominate a deserving teacher! Solicit supporting letters from the nominee's present and former students. Contact his or her colleagues for additional endorsements. Document any form of recognition by the nominee's home institution of excellence in teaching, as well as special assignments and mentoring roles facilitating good teaching. Of special note would be the number and quality of students for whom the nominee provided primary inspiration to continue their study of biology, especially for students who subsequently earned advanced degrees. In short, document the educational impact this individual has made by virtue of his or her role as a biology professor.

Nominators should prepare a portfolio containing at least a letter of nomination, the nominee's current *curriculum vitae*, and supporting letters, together with the Nomination Form for the Meritorious Teaching Award and other relevant documentation. Submit all materials in triplicate by the February 1 deadline to: **Dr. Dwayne Wise**, Department of Biological Sciences, P. O. Drawer

GY, Mississippi State University, Mississippi State, MS 39762; 662-325-7579; fax 662-325-7939; <a href="mailto:daw1@ra.msstate.edu">daw1@ra.msstate.edu</a>. If you have any questions, please call me or send an email. Files for previously nominated candidates who did not receive the award will remain active for two additional years, and these files may be updated. Such updated files are very carefully considered by the committee. The committee would welcome the task of deciding among several candidates.

Thanks for taking the initiative to nominate your favorite teacher!

**Dr. Dwayne Wise**, Chair ASB Meritorious Teaching Award Committee

#### ASB Lucrecia Herr Outstanding Biology Teacher Award (\$750)

ASB maintains an enrichment fund to sponsor long- and short-range objectives to advance biological education through teaching and research. The Enrichment Fund Board is chaired by Michael Dennis. As has been the custom for the past several meetings, ASB recognizes individuals for their achievements and dedication to biology education at the secondary school level. The awardee is invited to attend the annual meeting and be honored. The use of money from this fund shows appreciation for excellence in teaching at the secondary level, and to reach out to our colleagues in the teaching profession. Contributions to the fund can be made at the annual meeting or can be sent to the Treasurer of ASB whose address can be found in the inside front cover of this issue.



Includes detailed illustrations of taxonomic features, color photographs of living specimens, and maps indicating distribution throughout the state

Illustrated, \$27.50 PAPER



#### **ALL TAXA BIODIVERSITY INVENTORY (ATBI)**

#### GATLINBURG, TENNESSEE

ATBI is an organization devoted to surveying all life in the Great Smoky Mountains National Park.

More information about the ATBI and Discovery Life in America (DLIA) may be obtained from the Executive Director, Todd Witcher, by e-mail todd@dlia.org. The website is http://www.discoverlifeinamerica.org or at http://www.dlia.org. The mailing address is Discover Life in America, 1314 Cherokee Orchard Road, Gatlinburg, TN 37738-3627. The telephone number is (865) 430-4752.cs

#### SOUTHERN APPALACHIAN FOREST COALITION (SAFC)

#### ASHEVILLE, NORTH CAROLINA

As stated in their newsletter *Across Our Mountains*, SAFC is an organization dedicated to "working together to protect and restore southern Appalachian forests."

More information about SAFC may be obtained from their web site at http://www.safc.org, and by e-mail at safc@safc.org. The mailing address is Southern Appalachian Forest Coalition, 46 Haywood Street, Suite 323, Asheville, North Carolina 28801-2838. The telephone number is (828) 252-9223.cs

#### A LETTER FROM THE TREASURER

#### Dear ASB Member:

As you know, ASB strives to serve the educational and scientific community in many ways. These endeavors also serve the world community. ASB encourages the advancement of biology by

- The promotion of research in biology
- The increase and diffusion of knowledge of biology
- · The application of biology to the solution of biological problems
- The preservation of biological resources
- Its meetings, reports, discussions, and publications to promote scientific interests and inquiry

Website: http://www.sebiologists.org.

#### **PURPOSE**

The Association of Southeastern Biologists was established in 1937 by biologists concerned with the quality of biological research in the southeastern United States. Today, ASB is the largest regional biology association in the country, and is committed to the advancement of biology as a science by the promotion of science education, research, and the application of scientific knowledge to human problems.

#### WHO WE ARE

ASB members include faculty, students, researchers, conservation workers, military and government personnel, and business people with a common interest in biological issues in the southeastern United States. Interests are diverse but range from genetics and molecular biology, to physiology and population ecology, to community and ecosystem ecology.

#### **PATRONS**

A2Z Convention Services, Mebane, NC
Associated Microscope, Inc., Elon, NC
AST Environmental, Decatur, AL
Tim Atkinson, Elon, NC
Breedlove, Dennis and Associates, Inc., Winter Park, FL
Brooks/Cole Cengage Learning, Belmont, CA
Carolina Biological Supply Company, Burlington, NC
Martin Microscope Company, Easley, SC
Marilyn S. Pendley, Hudson, NC
Southeastern Naturalist (Humboldt Institute), Steuben, ME
Dwayne Wise, Mississippi State, MS

#### **AFFILIATE SOCIETIES**

American Society of Ichthyologists and Herpetologists, Southeastern Division Beta Beta, Southeastern Districts I and II Botanical Society of America, Southeastern Division Ecological Society of America, Southeastern Chapter Society of Wetland Scientists, South Atlantic Chapter Southeastern Microscopy Society Southeastern Society of Parasitologists Southern Appalachian Botanical Society Society of Herbarium Curators

#### AWARDS PRESENTED BY THE ASSOCIATION

The Association and its affiliates present a number of awards at the annual meeting. These include several for outstanding research, plus service awards.

#### **ASB Awards**

- Meritorious Teaching Award presented in recognition of outstanding teaching and mentoring of students. This is the association's most prestigious award. Sponsored by ASB Patron Member Carolina Biological Supply Company, Burlington, NC.
- Lucrecia Herr Outstanding Teacher Award presented in recognition of outstanding dedication to biology education at the secondary school level. Sponsored by the ASB Enrichment Fund.
- Robert H. Martin Professional Excellence Award presented in recognition of devoting a lifetime career to biology education and research, and/or to the biology profession. Sponsored by ASB Patron Member Martin Microscope Company, Easley, SC in memory of company founder Robert H. Martin, Sr.
- John Herr Lifetime Achievement Award presented to recognize unusually significant contributions to the life of the Association of Southeastern Biologists and to biology in the southeastern USA. Sponsored by ASB.
- Student Research Award presented to a student member for outstanding research. A written manuscript is required as well as an oral presentation at the annual meeting. Sponsored by ASB Patron Member Martin Microscopy Company, Easley, SC.
- Brooks/Cole Cengage Learning Student Research Award in Aquatic Biology presented to that student whose research in aquatic biology is deemed outstanding. Sponsored by ASB Patron Member Brooks/Cole Cengage Learning, Belmont, CA.
- Senior Research Award presented to a senior member for outstanding research. A written manuscript is required as well as an oral presentation at the annual meeting. Sponsored by ASB Patron Member Marilyn S. Pendley, Hudson, NC.
- Student Poster Award presented to a student member who has the best overall poster at the annual meeting. Sponsored by ASB Patron Member Brooks/Cole Cengage Learning, Belmont, CA.
- **Travel Support Grants** given to assist graduate students with expenses at the annual meeting. Sponsored by ASB.
- **Research Award in Microbiology** presented to a member for outstanding research in Microbiology. Sponsored by ASB.

#### **Affiliate Awards**

- The North Carolina Botanical Garden Award sponsored by the NCBG. Presented to a member for outstanding research which best advances our understanding of the biology and conservation of the southeastern plants.
- **Eugene P. Odum Award** sponsored by the Southeastern Chapter of the Ecological Society of America. Presented to a student member for the most outstanding paper presentation in the field of ecological research.

Elsie Quarterman-Catherine Keever Award – sponsored by the Southeastern Chapter of the Ecological Society of America. Presented to a student member for the most outstanding poster presentation in the field of ecological research.

- Ichthyology and Herpetology Awards sponsored by the Southeastern Division of the American Society of Ichthyologists and Herpetologists. Presented to a student member for outstanding research in each of the two categories.
- Elizabeth Ann Bartholomew Award sponsored by the Southern Appalachian Botanical Society. Presented to individuals who have distinguished themselves in professional and public service that advances our knowledge and appreciation of the world of plants.
- Outstanding Student Paper and Poster Awards sponsored by the Southern Appalachian Botanical Society. Presented annually to a student with best paper and to a student with best poster.
- Earl Core Student Award Sponsored by the Southern Appalachian Botanical Society. Presented annually to assist students with their research projects.
- Richard and Minnie Windler Award sponsored by the Southern Appalachian Botanical Society. Presented annually to the author or authors of the best systematic botany paper published in *Castanea* during the previous year.
- **Student Award in Plant Science** sponsored by the Southeastern Section of the Botanical Society of America. Presented to a student for the most outstanding paper presentation and to a student for the most outstanding poster in plant science.
- **Byrd Award** sponsored by the Southeastern Society of Parasitologists. Presented to a member for outstanding research in the field of parasitology.
- Ruska Award sponsored by the Southeastern Microscopy Society. Presented annually to recognize and reward student excellence in research in which microscopy is used as a research tool.

#### **ANNUAL MEETING**

Annual meetings are hosted by member institutions throughout the southeast. Meetings are in April, and include a distinguished plenary speaker, special symposia, field trips, oral and poster presentations of research, workshops, social events, exhibits, election of officers, and award presentations.

#### MEMBERSHIP

The Association of Southeastern Biologists currently has about 1400 members, spread among 220 academic and 60 non-academic institutions.

#### **ACTIVITIES**

The Association publishes a quarterly bulletin, Southeastern Biology, which contains the program of the annual meeting and abstracts of papers presented, book reviews, science news and information about scientists in the southeast, Association affairs, and special features of regional or timely interest.

#### EIGHT REASONS TO BE AN ACTIVE ASB MEMBER

- 1. Online access to Southeastern Biology, the Bulletin of the Association.
- 2. Subscription to Southeastern Naturalist, the Journal of the Association.
- 3. Privilege of presenting papers and posters at the annual meeting.
- 4. Publication of your abstracts and articles in Southeastern Biology.
- 5. Participation in recognition, honors, and awards competition.
- 6. Representation of your interests in regional, national, and worldwide governmental, educational, and industrial programs concerning biology
- 7. A vehicle to showcase and support students' work in the biological sciences.
- becomes part of over 75 years of significant biological legacy in the southeastern United States.

8. Participation is a commitment to your profession and your active support A contribution to the ASB Enrichment Fund will help to insure the continuation of these efforts. Please consider what you may do. YES. I want to contribute to the ASB Enrichment Fund! I enclose my contribution of \$ . Please use this to further the interests of ASB and its Members. I would like to see the ASB Enrichment Fund used in the following areas (Check those you wish to support): Research Awards Student Research Awards Graduate Student Travel Grants Speakers & Programs for the Annual Meeting \_\_\_\_ Outstanding Teacher Awards Other (please list) Please make any checks payable to ASB. Please mail your contributions and ideas to: Tim Atkinson Association of Southeastern Biologists P. O. Box 276

Elon, NC 27244-0276

# ASB and the *Southeastern Naturalist* ... A shared tradition of natural history scholarship and a NEW Partnership!



Adopted as
the Official Journal of the
Association of Southeastern
Biologists and offered as a
special member benefit! See
ASB membership form or go
to www.sebiologists.org for
more details.



- The latest regional natural history research: over 850 pages in 2011, and 7,824 pages since 2002.
- Free online access for SENA subscribers to both the Southeastern Naturalist and its co-published journal Northeastern Naturalist at www. eaglehill.us.
- Online supplementary files (data tables, audio/video files, etc.) possible!
- Notes section presenting brief, significant field observations.
- Concise descriptions of new and notable books.
- ASB members in good standing who choose to publish in SENA now receive a \$10 per page reduction in page charges if they are the lead and corresponding authors.

For more information about the journal or submissions, visit us at: www.eaglehill.us/sena

## Southeastern Naturalist

Volume 11	2012 Number	Number 2	
RESEARCH ARTICLES			
New Skeletal Remains of <i>Mammuth</i> their Historical and Paleoecological David B. Patterson, Alfred J. Mead		163	
Temporal Aspects of Leprosy Infect Andrew J. Williams and William J	tion in a Wild Population of Nine-Banded Armadillos . Loughry	173	
Habitat Selection by Nutria in a Fr Lauren E. Nolfo-Clements	eshwater Louisiana Marsh	183	
Effects of Feral Swine (Sus scrofu) Ruth M. Elsey, Edmond C. Mouton	on Alligator ( <i>Alligator mississippiensis</i> ) Nests in Louisiana n, Jr., and Noel Kinler	205	
Population Characteristics of the M Watershed, Arkansas Allison M. Asher and Alan D. Chri	Inssel <i>Villosa iris</i> (Lea) (Rainbow Shell) in the Spring River	219	
River Basin, Alabama	cs on Water Quality and Fish Assemblages in the Tallapoosa	239	
Canals as Vectors for Fish Moveme Lepisosteus osseus L. (Longnose Ga	ch, R. Jason Dickey, Wendy C. Seesock, Cliff Webber, and David R. Bayne ent: Potential Southward Range Expansion of ur) in South Florida ge, Jay W. Munyon, Kelly B. Gestring, and John I. Galvez	253	
Algal Community Composition from Joseph N. Dominy, Jr. and Kalina	m Kaolin Recovery Ponds Located in Middle Georgia M. Manoylov	263	
	<i>thechiniscus biscaynei</i> , nov. sp. (Arthrotardigrada: grade from Biscayne National Park, Florida and Cullen Miller	279	
Southern Two-Lined Salamander D Kyle Barrett, Stephen T. Samoray,	Diets in Urban and Forested Streams in Western Georgia Brian S. Helms, and Craig Guyer	287	
from Two Mitochondrial Genes	North American Genus <i>Pseudemys</i> (Emydidae) Inferred	297	
Thomas G. Jackson, Jr., David H.	· · · · · · · · · · · · · · · · · · ·	311	
Hoop Net Traps	rove Freshwater Turtle Capture and Recapture Success with	311	
	cology of Setophaga cerulea in the Cumberland Mountains, TN	319	
Growth of Serenoa repens Planted i Tammy E. Foster and Paul A. Schr		331	
	of an Invasive Plant ( <i>Melaleuca quinquenervia</i> ) on Home-range e Florida Panthers ( <i>Puma concolor coryi</i> ) within Big Cypress National III, and Martin B. Main	337	
NOTES			
Photographic Evidence of Wild Flo Roy McBride and Rebecca Sensor	rida Panthers Scent-Marking with Facial Glands	349	
	of the Blue Catfish ( <i>Ictalurus furcatus</i> ) in the Satilla River, GA Bowen, Jason S. Mitchell, and Justin Bythwood	355	
GULF OF MEXICO NATURAL ARTICLES	HISTORY AND OIL SPILL IMPACTS SPECIAL SERIES		
Conservation and Management Impoeepwater Horizon Disaster Orin J. Robinson, J. Curtis Burkha	plications Regarding Local Avian Diversity Following the lter, and John J. Dindo	G29	
NOTEWORTHY BOOKS		359	



#### OBITUARY

#### Frank A. Romano III 1949-2012

Journal Editor's Note: The following obituary is reprinted from the August 19, 2012 issue of the Tardigrada Newsletter with the permission of the writer Dr. Diane Nelson.



Dr. FRANK A. ROMANO III. retired chair of the Department of Biology, Jacksonville State University, Jacksonville, Alabama, passed away on 17 August 2012 after an extended battle with esophageal cancer. He is survived by his wife ELAINE and three grown children. They will have visitation for FRANK at KL Brown Funeral Home in Jacksonville on Wednesday, August 22nd at 5:00 PM followed by a memorial service at 6:00 PM. In lieu of flowers, donations can be sent to the JSU Student Research Fund. Details for donations will be posted on the JSU Biology Web page. Cards can be sent to their home address at 301 Macon Drive Jacksonville, AL 36265, Photos and videos can be viewed on the JSU Biology Web Page

(direct links: Friends about FRANK, Outdoor Classroom and photos, JSU Biology obituary).

A New York native with a PhD from Syracuse University, FRANK joined the JSU faculty in 1989 and became chair in 2002. He retired in May 2012, due to his illness. Throughout his career, his professionalism and rapport with his students and colleagues were unparalleled. Among his recent accolades was his selection for the 2010 Meritorious Teaching Award given by the Association of Southeastern Biologists. In honor of his retirement, the "Dr. FRANK ROMANO III Outdoor Classroom" was dedicated at Jacksonville State University.

Frank had a unique ability to interest students in pursuing research, especially sharing his fascination and enthusiasm for working with tardigrades. Many of his students earned their Master's degrees at JSU studying the ecology of limno-terrestrial and marine tardigrades, and several presented their research at our international symposia. One of FRANK's students, Dr. BRENT NICHOLS, who went on to earn his PhD at the University of South Florida under Dr. JIM GAREY, played a major role in organising the IX International Symposium on Tardigrada in Tampa, Florida, USA, and served as one of the Guest Editors for the symposium volume published in Hydrobiologia.

FRANK was the man instrumental in shaping the education and careers of his beloved students. This is what BRENT NICHOLS says about FRANK: "You go off to college with an intended agenda aimed at creating the foundation for your future. Then you meet a unique individual that just "gets" it, and somewhere along the

way something happens and you realise that, along with thousands of other students, you have had the opportunity to learn from one of the greatest teachers to ever walk the JSU campus. However, there are a select few of us, those who dared to push harder and whose lives were forever changed by that One Man, his dedication and his belief in what we could accomplish. I Am One. Frank is My Teacher, My Mentor and My Colleague. Best of all, Frank is my Friend. I Will Miss My Friend!"

Those of you who were fortunate to know FRANK from his attendance at our international Symposia were blessed to have a friend and a colleague who shared his enthusiasm for life and tardigrades and his positive outlook, sense of humour, and pride in his Italian heritage.

It's been 20 years since FRANK asked me at an ASB meeting to help him and his students study tardigrades. I am privileged to have had such a long friendship with this dedicated man, who has meant so much to so many people.

Sent in by DIANE NELSON

ASB Patron Members 557



#### Your best opportunity for convention success!

-Official Meeting Management Company of the Association of Southeastern Biologists-

-ASB Life Member-

-ASB Patron Member-

Over 25 Years Experience!

<u>Meeting Management Services</u> – Detailed planning, transparent budgeting, F&B Management, meeting space organization, sponsorship programs, Exhibitor management, graphic and signage planning, hotel contracts/negotiations, etc.

<u>On-Line Registration</u> – Cvent-The Nation's largest event management software. An affordable, world-class, web-based registration software.

On-site Registration and On-demand Badge Printing — No long lines onsite for your attendees. Real time data is provided during the meeting to support F&B planning, session attendance and money-saving. Comprehensive demographics is presented hours after your meeting to present to your Board.

 $\underline{\textbf{Lead Retrieval}} - \textbf{A no-cost-to-you approach to ensure your Exhibitors gain the ROI from the event.}$ 

Attendance Tracking - CEU tracking and certificate printing of attendance.

<u>Electronic Abstract Submitttal</u> – Submit sessions electronically via a web-based portal. Index and organize for Onsite Programs and meeting space.

Contact Us for a Free Quote PO Box 1088 Mebane, NC 27302

www.A2ZConvention.com A2ZConvention@gmail.com A2ZConvention@yahoo.com 336 213 7373 On Line Registration Software Powered by:



#### From Associated Microscope NEW LEICA MICROSCOPES HIGHEST QUALITY WITH LATEST TECHNOLOGY!

Call For A Free Demonstration!!!!



#### DM750 Compound Microscope

EZ-4 Stereo Microscope

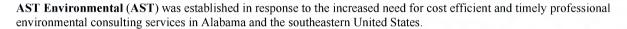
Call for State Contract Pricing in South Carolina, Virginia and Georgia. Also call on orders qty: 10+.

Associated Microscope, P.O. Box 1076, Elon, NC 27244
Telephone: (800) 476-3893; Fax: (336) 538-1847
Email: info@associatedmicroscope.com
Web Site: www.associatedmicroscope.com

ASB Patron Members 559

# AST Environmental

## is proud to be a *new* patron member of the Association of Southeastern Biologists!



**AST** promotes a culture of integrity, innovation, and efficiency. Ethical business practices and consulting approaches are of utmost importance.

**AST's** clients benefit from the wide range of knowledge and experience of our professional staff. Our commitment to excellence and efficiency is demonstrated by our extensive list of return clients.

**AST** is experienced in various aquatic survey techniques including **EPA Rapid Bioassessment**.



AST's Aquatic Resource Team is equipped to perform **population studies** for aquatic organisms, and **water quality assessments** in accordance with various state and federally prescribed protocols.

AST's environmental scientists and biologists are experienced in performing species assessments and habitat assessments for protected fauna and flora. The Team specializes in aquatic fauna and is permitted to survey for most of the federally protected fish, mussel, and snail species

in the Southeast. AST has SCUBA and HOOKAH diving capabilities.

**AST** 

Environmental • 98 Mark Selby Prvt. Dr. • Decatur, AL 35603 • 256.476.7355



## BREEDLOVE, DENNIS & ASSOCIATES, INC.

## Consultants in the Environmental and Natural Resources Sciences

Breedlove, Dennis and Associates, Inc. (BDA) is a professional environmental and natural resources consulting firm founded in 1976. Since its inception, BDA has established a reputation for solving the most difficult environmental problems through the application of good science, knowledge of the regulations, and the ability to communicate with regulators and clients. With offices in Winter Park, Tallahassee and Brooksville, Florida BDA services clients throughout the Southeastern United States.

330 West Canton Avenue, Winter Park, FL 32789 • 407.677.1882 www.bda-inc.com

ASB Patron Members 561



#### **Proud to be a patron member of the ASB!**

#### **NEW TITLES** from Brooks/Cole Available **NOW!**



Biology: The Unity and Diversity of Life, Twelfth Edition Cecie Starr, Ralph Taggart, Chris Evers, Lisa Starr ISBN 10: 0-495-55792-7 ISBN 13: 978-0-495-55792-0



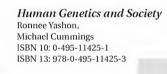
Bond's Biology of Fishes, Third Edition Michael Barton ISBN 10: 0-12-079875-1 ISBN 13: 978-0-120-79875-9



Living in the Environment: Principles, Connections, and Solutions, Sixteenth Edition G. Tyler Miller, Jr., Scott Spoolman ISBN 10: 0-495-55671-8 ISBN 13: 978-0-495-55671-8



ISBN 13: 978-0-495-55795-1





Human Heredity: Principles and Issues, Eighth Edition Michael Cummings ISBN 10: 0-495-55445-6 ISBN 13: 978-0-495-11425-3



Virtual
Biology Labs
14 Modules
30 Simulations
130 Activities
Contact your local
sales representative
for information.



Biotechnology: An Introduction, Updated Second Edition Susan R. Barnum ISBN 10: 0-495-11205-4 ISBN 13: 978-0-495-11205-1

Visit us online: www.cengage.com/biology for more infomation.

# Carolina's Perfect Solution® Specimens Simply the Best—Guaranteed.

Compare Carolina's Perfect Solution® preserved specimens to any others. If you are not completely satisfied that our specimens are the best, we will refund or credit your purchase.

It's that simple.

#### Carolina Biological Supply Company

2700 York Rd • Burlington NC 27215 866.815.2450 • www.carolina.com



ASB Patron Members 563

Martin Microscope Company
Since 1946





www.martinmicroscope.com





## Humboldt Institute Natural History Seminars at Eagle Hill on the coast of Maine

Our advanced and specialty field seminars for professionals and naturalists attract participants from all across the United States, Canada, and other countries. Programs generally involve one week of intensive practical field experiences, follow-up lab work, and discussions, and are taught by leading national and regional authorities. Graduate and undergraduates with a serious interest in the seminar program and/or related subjects are welcome.



Information is available on . . .

- natural history science seminars graduate and undergraduate university credits
- continuing education units/recertification credits art workshops and courses

www.eaglehill.us office@eaglehill.us

Humboldt Field Research Institute, PO Box 9, Steuben, ME 04680 207-546-2821, Fax 207-546-3042

#### **ASB Membership Form**

ASB membership includes discounts on annual meeting registration and on subscriptions to Southeastern Naturalist (SENA), the official journal of ASB.

To join or renew and pay by cash, check, or money order, complete contact information below, enclose cash, or check/money order payable to Association of Southeastern Biologists, & send by mail. To pay by credit card, complete contact information & credit card information, & send by reply e-mail, mail, or fax. If you would like further information or have questions, contact: Tim Atkinson, ASB Treasurer & Business Manager, PO Box 276, Elon, NC 27244, Telephone 336 538 6224, Fax 336 538 6322, Cellular 336 214 8334, tim.atkinson@carolina.com.

Name:					
Work E-mail:					
Personal E-ma (At least one v	ail: valid e-mail address is	required	.)		
Work Address:					
City:		State:	Zip (	Code:	
Work Telephone:		Fax:			
Home Address	:				
City:		State:	Zip (	Zip Code:	
Cell Phone:		Home Telephone:			
Card Type:	American Express Master Card		Discover	Visa	
Card Number:					
Card CVV Number: (Three- or four-digit number on back of card.)					
Card Expiration	n Date:/				
Cardholder Nai	me: opears on card.)				

Contrib	NRICHMENT FUND CONTRIBUTION AMOUNT: \$utions to ASB, a not-for-profit organization exempt under Internal see Code Section 501(c)(3), are tax deductible.
	EMBERSHIP EMBERSHIP WITH SOUTHEASTERN NATURALIST SUBSCRIPTION
	Regular One-Year Membership \$50 Regular One Year Membership with Southeastern Naturalist Subscription \$70 (SAVE \$30 with this option!)
	Regular 3-Year Membership \$135 Regular 3-Year Membership with Southeastern Naturalist Subscription \$195 (SAVE \$75 with this option!)
	Student One-Year Membership \$20 Student One-Year Membership with Southeastern Naturalist Subscription \$40 (SAVE \$18 with this option!)
	Emeritus One-Year Membership \$20 (Any member who has been a member continuously for 10 or more years, & who has retired from professional duties, may request Emeritus status.)  Emeritus One-Year Membership with Southeastern Naturalist Subscription \$40 (SAVE \$20 with this option!)
	Life Membership \$500 (Life Membership is a one-time payment. All others are annual.) (Southeastern Naturalist [SENA] does not offer a Life Subscription option. Life Members who wish to receive SENA must pay \$32 per year for the SENA Subscription, an \$18 per year discount.)
	Patron One-Year Membership \$1000 Patron One-Year Membership with Southeastern Naturalist Subscription \$1020 (SAVE \$20 with this option!)
	Life & Patron – New, \$1500; Renewal, \$1000 (Requires \$500 initial, one-time Life Membership payment, plus \$1000 each year Patron membership payment.)



#### SOUTHEASTERN BIOLOGY

#### VOLUME 59, NUMBER 4, October, 2012 http://www.sebiologists.org

#### In This Issue

THE VIEW FROM HERE	429
ASB 75 <sup>TH</sup> ANNIVERSARY	431
EVENTS OF THE 2012 ANNUAL MEETING	
2012 ASB MERITORIOUS TEACHING AWARD (UNIVERSITY PROFESSOR)	435
2012 ASB LUCRECIA HERR OUTSTANDING BIOLOGY TEACHER AWARD	
(HIGH SCHOOL TEACHER)	440
2012 RESEARCH AWARD RECIPIENTS	
THE PEMBROKE GROUP AT ATHENS, GEORGIA	
ASB EXECUTIVE COMMITTEE MEMBERS AT THE ANNUAL MEETING	459
2012 ASB PLENARY SESSION	
SPECIAL EVENTS AT THE ANNUAL MEETING	
RESOLUTION OF APPRECIATION TO UNIVERSITY OF GEORGIA	514
ASB PATRON TESTIMONIAL	
NEWS OF BIOLOGY IN THE SOUTHEAST	515
Treasurer's Report for 2011	516
TREASURER'S ENRICHMENT FUND REPORT FOR 2011	516
MEMBERSHIP OFFICER'S REPORT	517
ASB STAFF, OFFICERS, AND EXECUTIVE COMMITTEE, 2012-2013	
ASB REPRESENTATIVES AND COMMITTEES, 2012-2013	
ADVERTISEMENT FOR COMPLEAT NATURALIST	
CALL FOR PAPERS AND POSTERS, 74TH ANNUAL MEETING, 2013	
SPECIAL FORMS FROM THE MEETINGS COORDINATOR	
BEQUESTS TO THE ASSOCIATION FORM	532
SPECIAL REMINDERS FROM THE JOURNAL EDITOR	533
NOMINATION FORM FOR ASB ELECTIONS, 2013	
ADVERTISEMENT FOR CONVIRON	
SUPPORT AWARDS FOR GRADUATE STUDENTS	536
GUIDELINES FOR POSTER PRESENTATIONS	537
REQUIREMENTS FOR RESEARCH AWARDS	538
REQUIREMENTS FOR SPECIAL AWARDS	544
ASB MERITORIOUS TEACHING AWARD ANNOUNCEMENT	546
NOMINATION FORM FOR ASB MERITORIOUS TEACHING AWARD ANNOUNCEMENT	547
ASB LUCRECIA HERR OUTSTANDING BIOLOGY TEACHER AWARD ANNOUNCEMENT	
ADVERTISEMENT FOR LSU PRESS	
ATBI AND SAFC INFORMATION	
A LETTER FROM THE TREASURER	
THE SOUTHEASTERN NATURALIST JOURNAL INFORMATION	
OBITUARY	
ASB Patron Members	

#### **PATRON MEMBERS**

A2Z Convention Services, Mebane, NC
Associated Microscope, Inc., Elon, NC
AST Environmental, Decatur, AL
Tim Atkinson, Elon, NC
Breedlove, Dennis and Associates, Inc., Winter Park, FL
Brooks/Cole Cengage Learning, Belmont, CA
Carolina Biological Supply Company, Burlington, NC
Martin Microscope Company, Easley, SC
Marilyn S. Pendley, Hudson, NC
Southeastern Naturalist (Humboldt Institute), Steuben, ME
Dwayne A. Wise, Mississippi State, MS